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Japanese management techniques and British workers : a study of labour control and conflict on the shop-floor with special reference to South Wales.

JAPANESE MANAGEMENT TECHNIQUES AND BRITISH WORKERS:

A Study of Labour Control and Conflict on the Shop-floor With Special Reference to South Wales

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ABSTRACT

This thesis is concerned with the 'Japanization at work' debate. It investigates different facets of the management of the labour process and employment relations in Japanese manufacturing transplants in South Wales and the process of emulation of similar management practices by a long established South Wales-based autocomponents factory (given the pseudonym 'CarPress').

Much of the literature in industrial sociology takes a benign view on the impact of Japanese management techniques on those individuals who bring their labour power to the shop-floor of the 1990s. The dominant perception of such new practices as teamworking, continuous improvement and employee involvement is that taken together, these constitute a means of 'empowering' workers and 'democratising' the management-labour relationship.

The thesis challenges this perception by systematically researching the interests and attitudes of workers who are subject to the new management techniques. The original research upon which it is based rests on shop-floor observations and interviews with managers and union officials at 15 Japanese transplants in South Wales; two surveys of workers at CarPress, involving the analysis of 920 questionnaires; over 150 semi-structured interviews with CarPress workers and managers; and a process of continual observation of developments at the factory between December 1993 and November 1995.

The research demonstrates how Japanese-style working practices dismantle traditional rank and file controls over the labour process, impose stricter managerial prerogatives and secure for capital a more flexible and productive consumption of labour power. Moreover, rather than create a new paradigm for cooperative and autonomous work relations, the thesis argues that taken together, the new management techniques constitute an explicit model of labour regulation and control.

Finally, the thesis integrates social action at the point of production with such economic and political developments as mass unemployment, the new customer-supplier relations and state intervention in industrial relations. It considers how our understanding of the relationship between these may contribute to contemporary labour process theory on the nature of hegemonic regimes in advanced capitalism.

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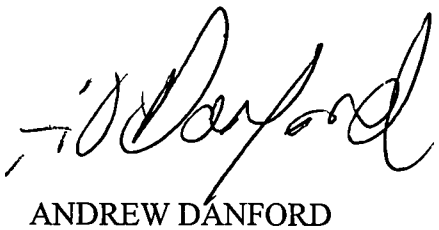
I dedicate the thesis firstly to Ieuan Thomas and his twenty friends and colleagues who were deprived of their livelihoods for having the temerity to resist.

Secondly, and above all, it is dedicated to the memory of my mother Irene Mary who, during 1993 and 1994 offered extra encouragement, and who, throughout her life, taught me the meaning of love, justice and peace.

DECLARATION

I declare that this is my own work and that the views expressed here are mine and not those of the University of Bristol.



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ABBREVIATIONS

ACTSS	Association of Clerical, Technical and Supervisory Staff
AEEU	Amalgamated Engineering and Electrical Union
APEX	Association of Professional Executive Clerical and Computer Staff
BAe	British Aerospace
BL	British Leyland
BMC	British Motor Corporation
BMH	British Motor Holdings
BS	British Standard
BSI	British Standards Institution
CAD	Computer-Aided Design
CAITS	Centre for Alternative Industrial and Technological Strategies
CBI	Confederation of British Industries
EEC	European Economic Community
EETPU	Electrical Electronic Telecommunication and Plumbing Union
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GM	General Motors
GMB	General Municipal and Boilermakers' Union
HRM	Human Resource Management
IDS	Income Data Services
IRS	Industrial Relations Services
JIT	Just-In-Time
JSSC	Joint Shop Stewards' Committee
LRD	Labour Research Department
LTA	Lost Time Accidents
MDW	Measured Day Work
MNC	Multinational Company
MSF	Manufacturing Science and Finance Union
NVQ	National Vocational Qualification
OECD	Organization of Economic Cooperation and Development
PBR	Payment By Results
PCB	Printed Circuit Board
QC	Quality Circle
SMED	Single Minute Exchange of Dies
SPC	Statistical Process Control
SSP	Statutory Sick Pay
TEC	Training and Enterprise Council
TGWU	Transport and General Workers' Union
TNC	Transnational Corporation
TQM	Total Quality Management
TUC	Trades Union Congress
WDA	Welsh Development Agency

CHAPTER ONE

JAPANIZATION ON THE SHOP-FLOOR: SOME CONCEPTUAL AND EMPIRICAL OBSERVATIONS

Japanese management methods have acquired a special place in a number of influential sociological studies of advanced capitalism. These analyses both reflect and contribute to a prevailing belief that for those who labour in factories, Japanese work organization can be an 'empowering', 'enriching' alternative to the alienation and degradation associated with conventional Taylorism. For example, one classic introductory text for sociology students suggests that Japanese corporations are more 'democratic' than their Western counterparts, that employees in Japanese plants at home and abroad enjoy a real sense of autonomy and involvement at work (Giddens 1993, pp.292-295). And in his recent polemic against the 'productivist' and 'welfarist' concerns of the British Left, Giddens (1994) argues that although Japanese lean production, like any capitalist manufacturing system, must ensure the effective use of time, it is a system which also encourages the investment of time in cooperative work relations and in developing close partnerships between customer and supplier. From this point of view, distinctive social relations in Japanese production provide new social indicators of labour performance - such as cooperation, autonomy and self-esteem at the workplace - which beneficially supplement traditional productivist concerns with labour productivity.

Similarly, salient features of Japanese employment relations together provide a key exemplar of Lash and Urry's (1994) conceptualisation of reflexive accumulation in the fragmented and flexible 'disorganized capitalism' of the late twentieth century. Here, Giddens' social solidarity within the factory is further enriched by the 'white collarization' and upskilling of blue collar workers. By participating in practices such as teamworking, job rotation and quality circles, workers in Japanese factories are held to accumulate valuable 'cultural capital' in the form of discursive or theoretical knowledge and information-processing skills.

We hear very little about the fundamental dictates and social dynamics of *capitalist* work organization in these accounts; its as if the factories of today are organized solely with social responsibility and welfare in mind rather than pumping ever more labour out of workers in the pursuit of profit. On the opening page of their book, *Economies of Signs and Space*, Lash and Urry announce with some glee that although Marx's analysis of the different circuits of capital can be incorporated into a 'post-Fordist' examination of the globalization of capital, the central tenets of his analysis of the contradictions of industrial capitalism can, post-1989, be confined as 'monstrous works' to the 'dustbin of history'. This truculent approach to academic argument might well be designed to enhance book sales but it also reflects the current drift in industrial sociology towards the business school agenda of managerialism and organization theory. The dominant assumption here is that managerial agency should now occupy the prime position on research agendas because shop-floor social action and labour resistance no longer constitute a significant complication in the 'classless'

and 'conflict-free' workplaces of the 1990s. As a consequence, many contemporary studies tend to gloss over the fact that the process of change at the workplace is determined not just by management but also by workers who often have separate interests at stake, and indeed, by the impact of external economic and political forces as well.

This thesis unambiguously opposes such tendencies. In analysing the impact of contemporary shifts in work organization and employment relations at the point of production, it gives precedence to the standpoint and interests of factory workers. It is concerned with various aspects of the current debate on the 'Japanization of British industry' which is defined and explored in some detail below. On one level, it seeks to build on our knowledge of the different labour processes, the organization of technology, the employment of new working practices and other management innovations, and the structure of social relations and industrial relations in Japanese manufacturing transplants in the UK. On another level - and the bulk of the thesis focuses on this - it explores the process of emulation of these facets of Japanese production by a traditional British manufacturing company. The thesis examines the market-led influences and the underlying political forces which catalyse the diffusion of practices, it considers the various mechanisms of diffusion, and it considers managerial strategy and agency here as well. But above all, it systematically analyses the views and actions of factory workers; those who have the greatest stake in employment, but more often than not, the least say over the direction of change on the shop-floor of the 1990s.

The thesis asks a number of pertinent questions of the assumptions that prevail in current sociological and business school discourse. For shop-floor workers, is there any substance to the fashionable and laudable maxim 'working smarter rather than harder'? To what extent is the restructuring of their work really 'enriching' and 'empowering'? Can Japanese employment relations be accurately characterised as more democratic and egalitarian than more traditional capitalist forms? And moving from managerial ideology to concrete specifics, what impact do the changes have on employees' work rates? What impact do they have on worker autonomy and control? How do they affect the skill content of different jobs? Do they provide more appealing forms of worker participation to supplant traditional trade union representative democracy? How do they affect relationships between union shop stewards and rank and file members and between unions and management? Indeed, how do they affect general relationships between workers and management or the more intimate relations between different workers? To put this another way, does the restructuring of work and employment relations best seem to generate harmony and trust on the shop-floor? Or is it best understood to lie on a continuum of capitalist exploitation and subordination of labour accompanied by inherent processes of class struggle and resistance?

This agenda inevitably emphasises processes at the point of production. However, the thesis does not make the mistake of abstracting these from wider political and economic influences. The imbalance of power between capital and labour in the 1980s and 1990s has ensured that although workers enjoy little influence over events outside the factory gates, different capitals and their principal guardian - the capitalist

state - have had a profound influence over their working lives. The thesis, therefore, investigates the different ways in which factors such as changing product markets, depressed labour markets, new supplier-customer relations, the dominance of the customer over the producer and the state's role in shaping developments in industrial relations have all impacted upon social action and the politics of production on the shop-floor.

JAPANESE PRODUCTION MODELS

The authors of the International Motor Vehicle Programme of research into productivity and management practices in the car industry provide one of the more influential analyses of Japanese production techniques. Integrating their surveys of global vehicle assemblers and suppliers with the conceptual work of Ohno (1988) and Cusumano (1985) in particular, Womack et al. (1990) present lean production as a pre-eminent, high productivity manufacturing system which is now dominant in Japan and which, these authors argue, can and must be emulated by manufacturers in the West. Tracing the development of lean production principles back to the early post-war Toyota press shops, Womack et al. emphasise how the logic of waste elimination in labour time, materials and product defects is central to the system. In contrast to the inflexible, dedicated press machines in the West, which required teams of specialists to master the time-consuming operation of die-changing, Toyota simplified the process and began involving shop-floor workers in a systematic reduction in press die changing times. This enabled the company to move into smaller batch production;

it caused reductions in machine downtime, line side buffers and product defects; and as a consequence, increased labour utilisation rates.

Toyota extended these waste reducing principles into its vehicle assembly shops where assembly line production was reorganised around flexible, multi-tasked teams. The newly 'empowered' team workers were also expected to assume the role of both industrial and quality engineer by participating in process improvement and defect reduction, or kaizen, to use the Japanese term. This authority even extended to stopping a whole production line rather than allow a faulty vehicle to pass downstream. In one of their few references to the effect of this on the intensity of production, Womack et al. exclaim in wonder that, 'as the work teams gained experience identifying and tracing problems to their ultimate cause, the number of errors began to drop automatically. Today, in Toyota plants, where every worker can stop the line, yields approach 100 percent. That is, the line practically never stops!' (1990, p.44).

Toyota mobilised the same logic of waste reduction in its restructuring of assembler-supplier relations. Ostensibly, these changes were aimed at reducing risks to incoming material and part supplies by replacing traditional low-trust, low-commitment, contractual relationships with more cooperative inter-firm relations. However, by integrating firms at different levels of its supply chain into the process of product and manufacturing development, Toyota exerted sufficient control over these suppliers to significantly reduce product and labour costs. Womack et al. observe that this integration also enabled the development of just-in-time production which, by

refining and more accurately coordinating the flow of parts into each stage of the manufacturing process, contributed to further substantial cost reductions and improvements in plant productivity.

These authors therefore provide a model of lean production which, in ideal typical form, removes all slack, all human and material waste, from the manufacturing operation. Moreover - and it is this which has caught the attention of many contemporary sociologists - by placing the 'dynamic work team' at the heart of the lean factory, they argue that shop-floor work in this highly stressed system somehow becomes 'enriched' and 'de-Taylorised' by incorporating new conceptual tasks and responsibilities: 'While the mass-production plant is often filled with mind-numbing stress, as workers struggle to assemble unmanufacturable products and have no way to improve their working environment, lean production offers a creative tension in which workers have many ways to address challenges. This creative tension involved in solving complex problems is precisely what has separated manual factory work from professional "think" work in the age of mass production' (1990, p.101).

Like many managerialist accounts of contemporary changes to the capitalist labour process, when it comes to considering labour's standpoint this analysis substitutes rudimentary management ideology for hard empirical evidence. The assessment of the impact of these changes on affected workers seems to be based on wishful thinking rather than any systematic investigation, which is notable for its absence. However, the interests of labour are not the central concern of this piece of research; the interests of capital are, and in particular, the labour productivity gains that might

accrue to Western manufacturing firms by adopting the Toyota lean production model. Indeed, related questions of the potentialities and practicalities of transferring a body of Japanese manufacturing techniques to the West continue to dominate the 'Japanization' debate rather than any serious consideration of the influence of particular transplants or particular management innovations on workers and their communities.

The same concerns inform the work of Kenney and Florida's (1993) more substantial analysis of Japanese transplant operations in the USA. In a way, these authors go even further than Womack et al.'s evangelism by insisting that not only is Western emulation of Japanese management necessary in terms of advancing industrial efficiency but it is also an *inevitable* outcome of the capitalist dynamic of technological and organizational progress. Drawing explicitly on Gramsci's treatment of Fordism as the most advanced system of production of its time - which he believed, with or without the cultural supports of 'Americanism' was destined to penetrate the West as a distinctive mode of production organization (Gramsci 1971) - they argue that the diffusion of Japan's 'epoch-making new model of technology, work and production organization' has the same inevitability about it.

Why is this? Kenney and Florida locate the advantages of lean production in the shifting social relations between intellectual and manual labour which underlie Japanese technological and organizational efficiency. They conceptualise Japanese manufacturing practice within a framework of 'innovation-mediated production' characterised essentially by the integration and harnessing of the intelligence and

knowledge of R&D staff, design engineers and shop-floor workers. Through the organizational mechanism of the multi-functional team, the shop-floor is transformed into a continuously innovative production laboratory. This creates advantages for both labour and capital: 'the new model has transformed ordinary workers' knowledge and intelligence into a source of value, created new methods of work, and established a very efficient system for turning the potential value embodied in innovations into mass-produced commodities that are the source of tremendous profit and capital accumulation' (1993, p.9).

Described in this way, Japanese work organization sounds an appealing and laudable alternative to the alienating and de-humanising organizational principles of Taylorism. However, Kenney and Florida's analysis is flawed by certain inconsistencies and ambiguities. Their research draws on surveys of various US-based Japanese transplants in different industrial sectors and on interviews with managers, engineers and shop-floor workers. But we are provided with only a minimum of qualitative analysis of worker consciousness at the point of production and we are left with little feel for the quality of working lives under these management regimes. Consequently, as Smith (1994, p.292) has observed, despite the use of the appealing metaphor 'factory as laboratory', we are provided with no empirical evidence of the relationship between engineers and production workers. This is unfortunate, in the light of the relative neglect of the former in much research of the contemporary restructuring of work in manufacturing industry. It is also unfortunate because, as with so much managerialist writing, the failure to adequately research both sides of the management-labour relation can lead to a mere reproduction of fanciful managerial

ideology. In this particular case, as one American ethnographer with a more authentic experience of life on a Japanese assembly line has noted, the tendency to emphasise the role of intellectual involvement, whether we term it 'innovation-mediated production' or something else, is largely due to an unquestioned acceptance of company rhetoric (Graham, 1995, p.7).

A more fundamental criticism concerns Kenney and Florida's professed value-neutrality in their refusal to make normative judgements on whether the Japanese way is 'better' or 'worse' than traditional management techniques (1993, p.10). This position is somewhat impaired by their insistent belief in the progressive inevitability of the transfer of innovation-mediated production. It is also impaired by the corollary of this position, that, 'like the opposition to Fordism in Gramsci's Europe, opposition to the transfer of the Japanese production system comes from the laggard, indeed, backward segments of society' (1993, p.315). It becomes more incongruous when the authors turn their attentions to the negative consequences of diffusion: labour intensification; health and injury risks; ideological control of workers through such socialization measures as sophisticated recruitment techniques and direct communications; strict absence and attendance policies; the exploitation of temporary workers; unequal opportunities for black workers; and anti-trade unionism. This is a long list. It is even conceded that the supposedly empowering team organization offers real advantages to capital in terms of reducing labour costs and increasing productivity, and that, through teamworking, the pace of production can be altered by adding or removing workers without hindrance (1993, p.37).

These admissions beg an important question. If Japanese 'innovation-mediated production' produces 'bads' as well as 'goods' then how do those human beings who labour under this system react to this? Are they so acquiescent and submissive that Japanese managements can literally raise the intensity of production with impunity? We are not told. The irony here is that in conceptualising a manufacturing system that theoretically constitutes the anti-thesis of Braverman's (1974) imperative of direct management control under scientific management, the authors, in effect, repeat the latter writer's mistake of objectifying labour and abstracting their analysis from the concrete reality of continuing class struggle and resistance. As with many managerialist writers, the material condition and class consciousness of labour is seriously neglected.

The implications of worker resistance take a more prominent position within the analysis of Oliver and Wilkinson's (1992) study of the 'Japanization of British Industry'. These authors also deal in universalistic models. Their paradigm of Japanese manufacturing practices follows a similar pattern to the above American writers. It idealises a system which completely synchronises production with the demands of the market and which aims towards the complete elimination of waste in production. This is achieved through the application of a variety of production practices which will be considered in some detail throughout this thesis: Total Quality Management (TQM) and continuous improvement (kaizen); production checks such as statistical process control (SPC); just-in-time production (JIT); labour flexibility; and multi-skilling through teamworking and job rotation. Oliver and Wilkinson argue that, cumulatively, these practices create a fragile production system which is severely

exposed to labour disruption. Consequently, the model incorporates supporting human resource management (HRM) practices such as long term job security for core workers; careful employee recruitment and selection techniques; performance related pay; direct communications and enterprise unionism. Risk avoidance also extends to buyers/assemblers maintaining long term relationships with suppliers and close scrutiny of their manufacturing costs and employment policies. Thus, in theory at least, the high dependency strategies of Japanese production methods 'demand a set of social (and technical) relations to support the fragile production system. Under this system, strategies for living with uncertainty are swept away' (1992, p.323).

On the basis of data accumulated from longitudinal survey techniques and a small number of limited case studies, Oliver and Wilkinson quantify an increase in the use of the above practices amongst both British employers and Japanese transplants. This leads them to assert that a 'Japanization of British industry' is in progress.

The problem with this rudimentary methodology is that it raises as many questions as it solves. Firstly, the analysis makes no attempt to explore variations in management practice between firms in different manufacturing sectors. For example, as both Milkman (1991) and Kenney and Florida (1993) discovered, rather than conforming to universalistic models, Japanese electronics assembly transplants in the USA were more influenced by the efficiency-based parameters of conventional production lines and the traditional social relations of the host country. In these conditions, fragmented assembly line work, American anti-trade unionism and limited employee involvement remained a simple, logical and effective method of labour control.

The authors' idealization of trust-building long term customer-supplier relations raises further problems. Suppliers are supposed to gain here by enjoying such advantages as more predictable markets, help and advice from the customer, financial security, and so on, although they are also under constant pressure to produce the right quantities of goods on time. But this oft-quoted feature of 'stakeholder capitalism' (Hutton 1995) rarely takes into consideration those who hold a stake in employment within supplier companies. Oliver and Wilkinson inform us that buyer/assemblers may often pre-empt disruption to JIT supplies by attacking traditional industrial relations practices at their supplying companies. If this is the case, then we need a more thorough investigation of the implications of such innovations for shop-floor social action in the many affected factories.

The same limitations to the authors' methodology raise a more fundamental criticism. The argument that the high dependency nature of Japanese production methods operates within supportive HRM policies creating 'a functional fit between production methods and the social relations in which they are embedded' (1992, p.323) constitutes the most original aspect of their thesis. They are not totally alone here. For example, Dohse et al. (1985) believe that 'only a comprehensive perspective that includes both the organization of the labour process and the organization of labour relations can adequately explain the functioning of the Japanese model' (1985, p.134)[1]. But if this is the case, then rather than rely on quantitative analysis to

[1] In posing the question of why Japanese workers seem to accept the labour intensity and stress which is inherent to their model of Japanese work organization, Dohse et al. (1985) emphasise different functional aspects of the social relations which accompany the highly exploitative production methods.

construct a facile functionalist fit between different sets of management practices we need to examine exactly how such innovations function on the shop-floor. In so doing, we might penetrate a further conundrum within Oliver and Wilkinson's argument. That is, if the new, 'Japanized' labour process really is characterized by more skill, more responsibility and more interest, to the extent that 'Japanese practices seem to hold out the opportunity for improved quality of life' (1992, p.326), then why does this shop-floor empowerment require propping up by special ideological measures? Should we not expect worker commitment to emerge naturally from the enriched labour process? On the other hand, if, in reality, the labour process is low-skilled, multi-tasked, intensified and alienating then the 'cultural logic' of extensive employee involvement may also make little sense. These contradictions and ambiguities can only be resolved by moving away from the managerialist agenda and considering the standpoint of labour. If we wish to understand the real logic of the new HRM practices then we must turn our attention to their recipients, that is, we have to thoroughly investigate their concrete impact on the consciousness and social action of the *human* resource.

Despite some differences in detail, the above theoretical approaches share a common approach in their construction of a paradigm of Japanese work organization and employment relations. This is based on the general principles of flexible, low waste production; enlarged and participatory labour processes; and cooperative employment

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That is, the life long system of employment induces worker dependence on single corporations; the individualised *satei* wage system - which is similar in many respects to performance related pay - constitutes a decisive factor in the 'committed worker syndrome' since it induces worker dependence on the arbitrary judgements of supervisors; and the absence of independent trade unionism militates against the collective articulation and representation of Japanese workers' interests which forces workers to turn against each other (in the form of peer pressure) rather than against their employer.

relations. Although some authors may be critical of these principles, and others find them elusive in practice, the paradigmatic approach nevertheless dominates research in this area (see for example, Bratton, 1992; Graham 1994 and 1995; Hayter 1993; Jurgens et al. 1993; Lincoln and Kalleberg 1990; Milkman 1991; Morris et al. 1994; and Schonberger 1982). Moreover, rather than measure concrete practice in Japan against these ideal type constructions, many researchers either prescribe, or attempt to substantiate, a process of international convergence through Western emulation of the Japanese paradigm: a 'Japanization' of industry.

Before we consider particular case study evidence of this emulation process and its impact on workers, we need to take a more critical look at its underlying assumptions. Some writers deny the Japanese any influence over contemporary workplace restructuring. For example, eschewing investigation into changes within organizations, Ackroyd et al. (1988) shift the analysis towards the national economic structure. They argue that fundamental differences between an integrated Japanese economy - characterised by high levels of coordination between banking, manufacturing and traditional capital - and a highly fragmented British economy, present decisive limits on any attempts by British firms to respond to the Japanese challenge. However, the problem with this approach is that although changes at the organizational level *are* mediated by the structural features of the political economy, as they are by structural *changes* in product markets, labour markets, state industrial policies and so on, this does not mean that investigations at the organization level must necessarily become secondary. Without the support of empirical evidence, Ackroyd et al.'s abstract conceptualisation (and rejection) of 'Direct', 'Mediated' and

'Permeated Japanization' has little utility. If we wish to investigate the hypothesis that Japanese work organization and labour performance may be having a significant global impact, then whether we call this Japanization, emulation, diffusion, or whatever, our first port of call must be the workplace. And if corporate attempts to raise labour productivity and profitability constitute the dynamic behind emulation, then developments in the process of extraction of surplus value at the point of production must surely be our prime, though not sole, focus of investigation.

This clarifies the level of analysis employed in this thesis but it does not deny external structural influences on work organization. In establishing the principles of work organization that require investigation, questions do need to be asked of the paradigmatic approach. To what extent can we accurately speak of a universalistic Japanese model to which competing Western manufacturers aspire? Do not the concrete ramifications of different sectoral practices, different technologies, product markets, labour markets, national state policies, industrial relations traditions, and indeed, distinctive single corporate cultures and logics together undermine notions of universalism and convergence? If, as Elger and Smith (1994b) observe in their conceptualisation of 'Disaggregated Japanization', Japanese transnational corporations are equivalent in intent to their Western counterparts in that, 'Japanese firms take advantage of different regions of the globe for market and cost reasons, and selectively adjust their factory regimes to fit into these local conditions' (1994, p.38), does this eliminate any organizational distinctiveness? Moreover, if, as the same authors suggest, emulating firms mobilise fears of the Japanese 'competitive threat' more as an ideological component in their attempts to reinforce traditional

management prerogatives, whilst merely borrowing certain elements of the Japanese model in typical piecemeal fashion, does this render the concept of 'Japanization' completely redundant?

These questions should certainly alert us to the fact that it would be wrong to 'overinterpret what are certainly significant innovations, to read them uncritically as the precursors of a wholesale transformation of work and employment relations, and thus to gloss over substantial continuities, real variations and persistent sources of conflict in the contemporary restructuring of work and employment' (Elger and Smith 1994a, p.5). But they should not mislead us into assuming that the influence of the Japanese is restricted to the realm of managerial ideology, that Japanese-style management innovations have had minimal concrete impact on the lives of British factory workers.

A personal anecdote might be useful here. For most of the 1980s, this author was a senior union representative at a large British Aerospace design and production plant in Bristol. One day in the summer of 1987, I remember being called before the site's assistant managing director, along with my union colleagues. This man came from the traditional management school; he communicated by barking rather than soft-talking, he was overweight, wore an old fashioned pin-stripe suit and smoked Churchillian-size cigars, continuously. I remember him standing up at the start of the meeting, placing a foot on the desk in front of him and announcing: 'Right lads listen to me. This site's in trouble. Our costs are too high, we don't produce enough and we don't produce on time. We're going to be Japanised'. He proceeded to outline

management's plans to introduce quality circles - and in the following months the site unions proceeded to successfully block them. But his presentation was not just an exercise in rudimentary management ideology, designed to instil a bit of employee discipline; instead, it marked the beginning of a long process of material change on the shop-floor and in the office. Over the following years, despite union opposition and conflicts, with the guidance of different teams of external consultants our management at Bristol and at many other BAe plants introduced teamworking, labour flexibility, reductions in idle time, direct communications, union marginalisation, individualisation of pay and successive lean manning strategies. These were not marginal changes or mere continuations of previous managerial agendas. Many people were sacked, whilst those lucky enough to keep their jobs suffered labour intensification, stress, insecurity and a clear diminution in their ability to fight back, whether collectively or individually.

On the basis of personal experience then, this author came to doubt the suspicion that management's understanding of Japanese manufacturing performance and new working practices was passed on to subordinates primarily in ideological terms. Even if companies rarely implement complete 'Japanese packages' in paradigmatic fashion, the ensuing, more fragmented changes can still significantly undermine shop-floor traditions with detrimental consequences for thousands of workers. And herein lies the link with Japanese transplants. The increasing number of Japanese firms operating in the UK provide authentic examples of Japanese management put into practice. Many British managers observe with some envy the ability of these TNCs to secure the same labour regulation objectives as their own by taking advantage of greenfield

conditions. When Japanese managements set up their manufacturing transplants abroad, they may often maintain the organizational and industrial relations traditions of both their particular sector and the host country, but they are also careful to sweep away those particular traditions which are hostile to their intensive capital accumulation strategies. For example, there is hardly a Japanese transplant operating on a green field site in the UK which permits such shop-floor traditions as seniority and informal rank and file controls over the labour process, or union regulation of skill and task demarcations, or union influence over effort rates and labour deployment.

The important point then becomes, to what extent, in the distinctive economic and political conditions of the 1990s, are British firms on brownfield sites emulating the managerial strategies of these transplants by implementing the same labour regulation policies and attacking their own shop-floor traditions? And is the social organization of production that is distinctive within Japanese methods causing a significant change in British shop-floor attitudes towards work and working practices (Turnbull 1986), or, is the process of 'Japanization' characterised by inherent worker resistance and conflict? These are the concerns of this thesis and it is in connection with the above relationship, that is, between managerial innovations in UK-based Japanese transplants and the impact of such innovations within emulating British firms, that the expression 'Japanization' is employed. Thus, although the thesis does not accord with the perspective applied by Oliver and Wilkinson, this author would not disagree with their heuristic usage of the expression: 'as a short-hand term to describe a package of changes that appear to be taking place in British manufacturing industry. In doing so, we are really using Japanization as a metaphor, to try to describe and better understand

one phenomenon (what is going on in UK industry) in terms of another (what is going on in Japanese industry)' (1992, p.342).

CASE STUDIES OF JAPANIZATION AT WORK

Comprehensive studies of the impact of Japanese management innovations on labour are few and far between. Whether managerialist in intention or not, most research designs rely on different types of managers as key informants, occasionally accompanied by a small number of perfunctory interviews with shop stewards and members of the trade union bureaucracy to convey a sense of balance. As a result, whenever the standpoint of the rank and file on the shop-floor is considered, the ensuing account relies upon, at best, empathetic understanding and at worst, pure speculation, rather than any systematic, in-depth analysis of workers' views. Of course, managers do provide crucial information on contemporary corporate strategies governing marketing and sales, product design, quality assurance and production. And as agents of capitalist control, they are key informants on questions of labour regulation. But accumulating data primarily from those representing the management side of the capital-labour relationship can sometimes result merely in a reproduction of managerial ideology as Trevor's (1988) interpretive account of the restructuring of Toshiba's electronics plant in Plymouth exemplifies[2].

[2] Trevor's (1988) 250 page investigation draws on qualitative analysis, spread over seven chapters, of interviews with a small number of senior managers at Toshiba along with just one trade union official - the evangelical 'new realist' national officer, Roy Sanderson of the EETPU (now AEEU). On this somewhat uneven empirical basis, we are informed that such innovations as careful employee selection and induction, total labour flexibility, single status, management-controlled direct communications, management-controlled company councils and no-strike agreements provide employees greater job

Moreover, many of the more radical exposures of managerial ideology and practice in Japanese production provide only a limited picture of the various ways in which worker resistance constrains the exercise of managerial prerogatives. Theoretical ideal types of management control become reified on a shop-floor devoid of politics. Delbridge et al.'s (1992) examination of management control and labour intensification under JIT/TQM regimes provides a case in point. These authors provide a compelling account of the ways in which the acceptance of new responsibilities and tasks under teamworking forces workers to become more accountable both to management and each other for their individual performance. The natural visibility of the production process and worker performance in a highly synchronized JIT factory offers management a simple means of direct control over the labour process. More subtly, the application of peer pressure in a 'market environment', where assembly line colleagues suddenly take on the role of customers cajoling each other to maintain performance, provides a more corrupting form of labour control. These regimes are presented as systems of efficient capital accumulation which 'more completely subordinate labour to capital than previous production regimes because they demand and create a situation where managerial prerogative prevails and where there is little, if any, room for employees to exercise counter-controls over the pace of work and task execution' (1992, p.98).

satisfaction and security. Significantly, the one chapter which considers the shop-floor's standpoint by analysis of an employee attitude questionnaire survey, provides little evidence to substantiate this.

This critique contains two problems. Firstly, like many others, it develops a model of control which focuses exclusively on developments at the point of production; it fails to link these with such external influences on worker behaviour as the debilitating effects of mass unemployment or state attacks on independent trade unionism. Secondly, although the analysis is written in terms of the effects of Japanese management innovations on workers, in fact labour is objectified. Relying on a few factory visits and additional secondary sources, social action on the shop-floor is ignored. Consequently, the authors must assume that in a state of 'more complete subordination', labour loses the means to resist.

In a more recent case study, Delbridge (1995) attempts to redress the latter criticism by employing participatory observation techniques in a UK-based Japanese electronics transplant. Here, the author provides useful anecdotal evidence of the stress and intensity of Japanese assembly line work; but on the basis of just one month's experience of this we are told that worker resistance is almost non-existent under such management regimes. He concludes that 'the experiences of workers under JIT and TQM reflect an increasingly effective pressure from management toward the processes of accommodation and adaptation by workers with the reduction in effective counter-control and resistance. In effect, workers are forced toward surviving rather than resisting their exploitation' (1995, p.814). Leaving aside the obvious point that for those who work in the factories of capitalist mass production, life has always been a question of endurance rather than *unceasing* resistance - meaning that any research project lasting a mere month would be somewhat fortuitous to capture the decisive forms of resistance which occur only periodically in response to certain managerial

challenges - the analysis still fails to investigate exactly why resistance is generally curtailed. Why do these transplant workers not unambiguously oppose their conditions of intense exploitation? Why do they turn on each other rather than management when the level of intensity is increased? Why is it a question of survival; why don't they just leave? These crucial questions remain unanswered because the analysis fails to procure the views of those who -if they are lucky - may spend, not one month, but all of their working lives labouring in factories.

On the other hand, it might be argued that this represents a primitive line of enquiry based on the supposition that the intensity of Japanese transplant production remains embedded in Western social values of instrumentalism. In traditional mass production factories, workers would be expected to reject managerial attempts to heighten levels of exploitation because dominant instrumentalist values permit them to think and act for themselves. As Graham puts it, 'workers are free to hate their work openly. Their attitudes are their own. The bargain they strike with the company is simple and straightforward: make quota and you get your pay' (1995, p.133). In contrast to this, much of the literature on Japanization emphasises those ideological and socialization components of Japanese production methods which attempt to colonise the worker's psyche in order to control his or her labour power.

In their study of Nissan's car assembly transplant in Sunderland, Garrahan and Stewart (1992) provide an influential analysis of this process; of managerial endeavours to control and subordinate the workforce by mobilising an ideology built on the appealing principles of consensus and participation. For these authors,

Nissan's organization of teamworking and labour flexibility has nothing to do with principles of enrichment and empowerment. The exigency for efficient, continuous mass production ensures that workers perform only a limited range of cognate tasks, day in day out. Workers exert minimal control here; labour flexibility and teamwork are effected on managment's terms. Nissan's system of lean production intensifies the extraction of surplus value on the simple basis of low skill job enlargement and the expectation that workers continuously move around the same types of machines and cover for absent colleagues where necessary. Moreover, under the guise of employee participation, workers hand over to management those individual tacit skills and elements of knowledge which may then be exploited to further intensify the rate of production.

The essential claim of this argument is that, despite the highly exploitative nature of the production system, Nissan's workers come to support and identify with the objectives of their employer. They display a 'corporate consciousness'. Garrahan and Stewart assert that in the absence of any effective means to articulate their collective identities and interests - such as an independent trade union - Nissan's workers become attracted to a seductive corporate ideology which advocates a collective spirit of teamwork and consensus. The idea of a dichotomy of opposing management and worker interests has no place here. An ideology of consent operates on two levels. Firstly, through specific social forms such as teamwork and kaizen which depend 'precisely upon self-subordination for it shifts the locus of control onto individuals, who perceive themselves as guardians of quality and flexibility' (1992, p.94). And secondly, through a wider organizational framework which ensures that Nissan's one-

sided vision of a classless factory can be reproduced on the shop-floor each day: 'what we are witnessing at Nissan is not only an organization which depends upon and promotes consensus-building structures for quality products. The flip-side of this is an organizational hierarchy of constraint, one that allows only those views of work which are commensurate with its own' (1992, p.111).

Once again, we are presented - even though this is most certainly not what these authors desire to see - with a picture of complete worker subordination, of total management control. Is there any substance in this? Although we must acknowledge the significant influence of mass unemployment and the lack of effective collective representation on worker consciousness, nevertheless, can we really expect individuals labouring under these regimes to display total commitment and even to participate in the intensification of their own exploitation? Different case studies of Japanese auto transplants in the USA suggest not. For example, Fucini and Fucini (1990), Graham (1995) and Rinehart et al. (1994) discovered that although shop-floor workers may display an initial enthusiasm for the process of kaizen as means of improving working conditions and health and safety, they soon become disillusioned with managements' sole interest in reducing waste and idle time. As a result, this process of 'mass employee participation' soon becomes the property of managers, engineers and just a sprinkling of token workers. This contrasting evidence exposes the fact that we have no real evidence of the extent to which Nissan has won the 'battle of hearts and minds' with its Sunderland workforce. Although Garrahan and Stewart raise many important conceptual points concerning labour exploitation under Japanese management regimes, their study is empirically flawed. On the authors' own

admission, they did not gain access to the factory and they interviewed only 19 out of the 3000 or so workers employed there. Consequently, the study is, for the most part, a dismantling of the distinctive managerial propaganda reproduced by Nissan's enthusiastic ex-Personnel Director (Wickens 1987) rather than a systematic evaluation of the concrete impact of Japanese management innovations on the shop-floor.

Distinctive corporate ideologies, of course, constitute just one example of capital's repertoire of labour control mechanisms. Technological development is another. The spatial reconfiguration of existing technology, such as a Japanese-style conversion of traditional clusters of single function machines into a multi-functional cellular organization (Schonberger 1986), can effect efficiency savings and significant shifts in shop-floor social relations. If new computer technologies are then incorporated into this reorganization of technology, then labour regulation may be further enhanced. Bratton's (1992) study of Japanization in the form of, what might be termed, 'computer-aided teamwork', found that this type of technological change, in small-batch skilled production work at least, provided a degree of shop-floor autonomy whilst simultaneously enhancing overall managerial control. Here we have a kind of technologically mediated 'responsible autonomy' (Friedman 1977). Bratton's operators enjoyed some discretion and new skills in the process of self-management of teams but senior management surveillance through computerized production control systems ensured the extension of overall managerial control over the labour process.

However, Bratton's case study analysis contains certain shortcomings. Ostensibly concerned with the process of 'Japanization at Work' it centres almost exclusively on

changes in technology. He fails to operationalize the full range of measures aimed at restructuring work organization and employee relations with which we identify the Japanese. The thesis is therefore incomplete. Moreover, its more salient points apply only to changes within small-batch craft production - an area of work which is important and interesting in itself - but, notwithstanding the quixotic ideas of flexible specialisation theorists such as Piore and Sabel (1984), this overlooks the fact that the dynamic of change associated with Japanese production techniques is located elsewhere, in capitalist mass production.

We must turn again to the USA for a more thorough examination of 'bases of control and resistance' at the point of production under a Japanese management regime. In her ethnography of shop-floor work at a Subaru-Isuzu Automotive (SIA) transplant - which utilised covert participant observation techniques - Graham (1995) provides a rich personal account of the day to day stress and conflict that accompanies life on a Japanese assembly line. Drawing explicitly on Burawoy's (1985) conceptualisation of the hegemonic factory regime, Graham argues that the success of the Japanese production system depends upon 'management's ability to fashion an environment which appears free of coercion, giving no impetus for resistance. Instead of management devoting time and energy to controlling the workforce directly, workers control themselves' (1995, p.97). She provides seven particular components of a multidimensional framework of compliance which together form, in Weberian fashion, an 'iron cage of control': sophisticated recruitment techniques; scrupulous employee induction programmes (both of these are eventually displaced by the practice of employing and monitoring temporary workers); the team concept and the

disciplinary influence of peer pressure; a philosophy of kaizen; shaping shop-floor culture from the top down; a computerized assembly line; and just in time production.

Graham usefully explores the contradictions between what is, in abstract terms, a sophisticated model of compliance and the harsher reality of working on an assembly line. For example, the increasing intensity of a labour process characterised by rapid and repetitive limb movements caused 25% of the workforce to suffer periodically from carpel tunnel syndrome and other disabilities after just a few months of employment. Yet, although the management tried hard to alleviate the symptoms of this labour intensification by offering different medications, it could not modify the driving logic of its system of lean, mass production: 'the repetition and speed of assembly line work was inherently harmful to workers. Any solutions that would reduce the work intensity created by repetition and line speed would threaten production quotas - something team members believed the company would never consider....Providing a truly safe workplace is beyond their [the company's] control in a competitive environment where the priority is quotas rather than safety first' (1995, p.93). And predictably, even in their non-union environment, Graham's workers do oppose this exploitation. She provides different instances of individual forms of resistance, for example, workers maintaining a silent protest during team briefings and more effective collective forms, such as team members surreptitiously stopping the line in order to gain a breather.

Graham's methodology does have certain drawbacks, however, in that by concentrating on the more mundane, everyday events which unfold on a transplant

assembly line it loses sight of the wider picture. Covert participant observation prevents the researcher from seeking answers to awkward questions from all actors involved in the politics of production, that is, different managers, shop stewards and a reasonable cross-section of factory workers. Moreover, her highly focused ethnography excludes historical analysis of the development of management-labour relations in the auto industry. Consequently, we are led to believe that, on the basis of surface appearances, the Japanese production model merely represents an extension of the 1970s job redesign/human relations movement and its attendant concerns with the consequences of worker alienation. The alternative possibility that many of the new management techniques may have the more fundamental objective of appropriating traditional worker controls on the shop-floor is ignored, as is the influence on this process of external agencies such as the customer and the state.

Nevertheless, this particular study succeeds in switching our attention away from managerial systems and simplistic abstract conceptualisations of 'total management control' by elevating worker actions and consciousness to a pivotal point in its investigation. In so doing, it underscores the essential contradiction between contemporary Japanese managerial ideology and the demands of capital accumulation: 'the Japanese model is not equipped to deliver on its promises to workers. During a corporation's quest to maximise profits, workers simply become expendable. Work intensification and safety, issues traditionally addressed by unions, are the first areas to be sacrificed for profit' (Graham 1995, p.154). And if this contradiction is embodied in certain forms of worker resistance on a non-union, greenfield site, where management could more readily fashion a pro-company culture, we should expect an

intensified conflict on the battle-scarred terrain of the conventional brownfield shop-floor.

Unfortunately, up to date empirical evidence on brownfield sites is somewhat scarce. However, the small number of case studies which investigated work organizational change and accompanying conflict during the 1980s do confirm this expectation. For example, in Britain's food processing industry, Scott (1994) discovered that the introduction of teamworking - ostensibly to develop fulfilling work routines and open relationships between workers and supervisors - could not disguise the inherently alienating nature of the assembly line labour process. Neither could it conceal management's demand for a tougher unilateral approach to discipline and effort. In his case study of the restructuring of work at a strongly unionised frozen food works, shop stewards were initially able to exploit the self-management of teamworking in order to maintain control over effort rates, labour deployment and job rotation. When management then decided to claw back its prerogatives, increase production and raise standards of discipline, it was forced to jettison the 'soft' participative approach and defeat rank and file opposition by provoking, and eventually defeating, an all-out strike.

Other case studies of British manufacturing plants attempting to emulate Japanese working practices in the 1980s found that, despite the distinctive free market economic and political environment of the time, and despite occasional management coercion, shop-floor resistance and trade union organization continued to place limits on the exercise of managerial prerogatives (Starkey and McKinlay 1989; Taylor et al.

1994; Turnbull 1986). Indeed, where the economic and political environment does act to enforce cooperative relations these are unlikely to be permanent. At Taylor et al.'s 'Central Rebuild' electronics plant for example, 'the orchestration of a qualified cooperation depended heavily on a sense of the continuing precariousness of the whole factory against a background of marked sectoral and regional recession' (1994, p.222). Thus, we cannot assume that the restructuring of work organization along Japanese lines and the promulgation of new, consensual corporate ideologies must necessarily, in mechanical fashion, engender a dynamic of Japanization in employment relations characterised by the emergence of worker loyalty and commitment.

In contrast to the currently fashionable conceptions of the 'conflict-free' factory, these studies suggest that capital's attempts to restructure the organization of work and the employment relationship are not unproblematic. They raise the possibility that despite managerial intimidation, despite the cumulatively pernicious impact of anti-trade union legislation from four successive Conservative regimes, despite the apparent demise of the strike weapon, despite the continuing rationalisation of jobs in manufacturing, and despite the crippling stranglehold of consumer debt to building societies and other financial institutions, workers still have a propensity to oppose managerial prerogatives. Why might this be?

Earlier in this chapter, the author posed a series of rudimentary questions to challenge some of the dominant business school assumptions which influence our understanding of contemporary change at the workplace. Questions such as what is the impact of the

new management techniques on effort rates? their impact on skills? on worker autonomy? and on workplace democracy and labour relations? These are all operationalised at various points in the coming chapters. But a central theme of the thesis - and one which is absent from much of the current literature - is that the implementation and unfolding of the new Japanese-style management practices in established factories is a long drawn out and complex political process which is propelled by a dynamic of tension, conflict and struggle between capital and labour. It cannot be presented merely as the unproblematic substitution of one model of work organization for another, as a clean rupture from Taylorism or Fordism for example. Managers and workers have conflicting class interests. For most factory workers, life on a production line remains arduous, monotonous and alienating. The slow, uneven development of formal and informal rank and file influence over the pace of work, job content, labour deployment and so forth was not the result of inherently cantankerous work attitudes but instead the outcome of a long, fragmented, collective struggle for at least a limited sense of dignity and autonomy at work. Contemporary management attempts to undermine these gains and secure its own prerogatives in the name of 'progress', 'efficiency', 'empowerment' and even 'company survival', are likely to be subject to different forms of working class opposition. The efficacy of this opposition will also be contingent upon the prevailing balance of power between capital and labour at the point of production and in the wider political economy. These are the realities which govern the perspective of this thesis; realities which provide an awareness that Japanization at the workplace is both a function and outcome of the immanent process of class struggle in advanced capitalist societies.

STRUCTURE OF THE THESIS

The thesis is divided into two unequal halves. Part One comprises just two chapters which investigate the nature of work organization and employment relations in Japanese manufacturing transplants in South Wales. Part Two comprises five chapters which together provide an in-depth case study analysis of the Japanization process at a long-established British autocomponents factory - given the pseudonym 'CarPress' - based in South West Wales.

Essentially, the original research upon which this thesis is based rests on interviews with different managers and shop-floor observations at 15 Japanese transplants in South Wales; interviews with trade union officials in the region; interviews with senior representatives of the Welsh Office, the Welsh Development Agency and different employers' organizations; two surveys of shop-floor and office workers at CarPress, involving the analysis of 920 questionnaires; over 150 semi-structured interviews with CarPress workers and managers; and a process of continual observation of developments at the factory between December 1993 and November 1995. A summary of the research methodology employed is provided in Appendix A.

Without becoming anchored to the idea of Japanese work organizational paradigms, the two chapters in Part One attempt to establish the more salient aspects of Japanese management techniques which some British firms, including the case study, may be attempting to emulate. Chapter Two focuses upon the organization of the labour process. Paying particular attention to the consumption of labour power in the

different transplants, it investigates the nature of the work on the shop-floor; the skill levels required; the intensity of work; labour deployment practices such as flexibility and teamworking; the role of Japanese transplant workers in job design; and linked to this, the extent to which they participate in Total Quality Management practices such as kaizen.

Chapter Three addresses the different transplant personnel policies and explores the connections between these and the disciplines of lean, mass production. Particular practices and strategies scrutinised are: recruitment, selection and equal opportunity policies; employee evaluation techniques; job security policies and the particular practices which underpin these, such as the exploitation of temporary labour and the extension of working hours; employee involvement practices such as direct communications and single status policies; and finally, the style of industrial relations and the role of trade unions.

Part Two encompasses the British case study. It is essentially an ethnography of one South Wales company's attempt to restructure both the organization of work and management-labour relationships on the shop-floor during the first half of the 1990s. Chapter Four introduces the case study firm and establishes the context for the processes of change which unravel in subsequent chapters. It briefly describes the depressed locality in which the firm operates and the hazardous market conditions in which it endeavours to survive. It also provides a summary of the mode of work organization and different labour processes employed on the shop-floor and in the engineering offices. The final third of the chapter begins exploring the influence of

Japanese manufacturing techniques on this particular factory. It investigates both the general impact of the Japanese on manager and worker consciousness and specific concrete mechanisms and market pressures which catalyse the emulation process.

The remaining four chapters are divided equally between the re-organization of work and the development of new personnel and industrial relations strategies. Chapter Five provides two interconnected accounts of the transformation of the case study firm's production control system and its intensifying impact on shop-floor labour processes. Firstly, the chapter traces the shift in the firm's production control system from a traditional, high stock, high buffer, 'just in case' arrangement to a low stock, low buffer, imperfect 'just-in-time' system. Secondly, it narrates management's simultaneous attempts to reclaim control over operators' work rates by substituting bell to bell measured day work for payment by results. Different worker responses to this rudimentary process of labour intensification are discussed.

The different facets of lean production control are not the only labour regulation mechanisms available to contemporary management. Commencing with a summary of the historical traditions of informal worker controls over the labour process, Chapter Six chronicles the introduction of teamworking and kaizen at CarPress. Drawing upon both qualitative and quantitative data, it analyses the different processes by which shop-floor controls and defensive practices are undermined, work rates are intensified and certain groups of workers suffer deskilling. Importantly, this investigation does not just rely upon a description of the impact of these developments

on the shop-floor; it also traces the complex political strategies and conflicts which accompany the management of change.

Shop-floor struggle comes to the fore throughout Chapter Seven in vivid fashion. Here, the process of introducing Japanese production techniques is placed into the context of institutionalised labour relations. The chapter describes management's initial attempts to fashion a more 'consensual' style of industrial relations - something akin to business unionism - by simultaneously incorporating the firm's senior shop stewards and exploiting the oppressive ideological impact of the British state's anti-trade union legislation. When the company fails to change the resistant attitudes of the shop-floor rank and file, 'consensus' rapidly transforms into coercion and victimisation. The chapter narrates the events which lead up to the summary dismissal of a number of scapegoated shop-floor workers and ends with a discussion of the various structural factors which currently inhibit worker resistance to such managerial intimidation.

Chapter Eight completes Part Two. Drawing again on both qualitative and quantitative material, this examines the impact of a package of new personnel measures - what we might call 'human resource management' - on the shop-floor. In particular, it critically addresses the assumption that socialisation measures of the kind used by Japanese transplant managements succeed in engendering positive worker commitment and corporate loyalty. Following a similar path to Chapter Three, it focuses upon the impact of new employee recruitment and selection techniques; equal opportunity policy; labour retention and job security policies; and again, employee

involvement measures such as more extensive employee communications and single status policies. The chapter ends with an investigation of the impact of the restructuring of work and employment relations on workers' values, that is, both customary instrumentalism and the more intimate traditions of shop-floor solidarity.

The concluding Chapter Nine draws together the transplant survey and case study evidence and outlines a model of Japanese labour regulation practices in South Wales. It then summarises the different mechanisms and processes which influence the diffusion of these practices and connects this with the impact of both the state and customer-supplier relations on workplace restructuring. Finally, it considers how our understanding of these new developments may contribute to contemporary labour process theory on the nature of hegemonic regimes in advanced capitalism.

PART ONE

INTRODUCTION

In contrast to elsewhere in the UK, manufacturing industry in Wales enjoyed a significant revival during the 1980s. Between 1985 and 1990, manufacturing output rose by 32.9%, 14.5 percentage points higher than the UK figure for the period; the long term decline of manufacturing share of total GDP was reversed - an unparalleled development in the OECD countries; and investment per manufacturing employee amounted to 167% of the UK average, the highest figure for any UK region (Price et al. 1994, pp.10-11).

Price et al. argue that recent inward investment in the region contributed substantially both to this superior economic performance and to the restructuring of Welsh manufacturing in favour of such light engineering sectors as automotive components, office equipment and consumer electronics. In fact, the 'Welsh renaissance' goes back further than this. The diversification and growth of the manufacturing sector took hold nearly three decades earlier and, just as today, was led by non-indigenous businesses including a high proportion of branch plants of international firms (Lovering 1983; Morris 1987). Many of these employers operated purely as low skill assembly units rather than centres of R&D and administration. Consequently, the process of job creation was accompanied by a qualitative erosion of job content and remuneration: 'the net result was an overall decline in the total of well-paid (male,

skilled) jobs, and a rise in lower-paid (female unskilled) employment' (Lovering 1983, p.61).

This restructuring process has continued unabated over recent years. During the 1980s, Japanese multinationals accelerated their search for overseas investments in response to a number of politico-economic pressures: the need to recycle Japan's trade surpluses; increasing protectionism in world markets; the appreciation of the yen; the increased prices of Japanese real estate and stocks which acted to push investment out; and the globalization of these firms' trade and corporate structures (Elger and Smith 1994a, p.20). Coincidentally, Japanese investment in Britain was actively encouraged by successive Conservative governments both to rejuvenate the country's declining manufacturing base and to undermine the traditions of free collective bargaining between employers and independent trade unions.

As a result, between 1986 and 1990, Japanese investment increased sevenfold in the UK. Wales was a major recipient of this; indeed, between 1979 and 1991, the region accounted for 14.2% of all Britain's foreign direct investment (Price et al. 1994, p.12). Many companies arrived in Wales because its restructured labour markets offered certain distinctive advantages. Of course, the factors which determine the specific location of foreign direct investment are many. However, as Morris and Hill (1991) point out, relative unit labour costs and labour adaptability constitute the most important considerations for Japanese companies. In Wales, the decline of coal, steel and older manufacturing industries created large pools of malleable, dependent labour

along the southern valleys and in the old industrial towns. This deindustrialisation also established the Welsh labour force as the lowest paid in the UK[1].

The presence of Japanese capital in Wales, therefore, is partly a function of these advantageous economic conditions. By 1992, the region contained the highest number of Japanese-owned manufacturing transplants in the UK: 34 factories which together employed 13,000 workers out of a total of 50,800 for the UK as a whole (Anglo-Japanese Journal 1992). These transplants operate in the consumer electronics, electronic components, autocomponents, office equipment and plastics and chemicals sectors. Many are concentrated in South Wales.

Part One of this thesis comprises a survey of the various facets of work organization and employment relations in 15 of these South Wales factories. It places a particular emphasis upon the impact of Japanese management techniques on the shop-floor labour process and on the management-labour relationship. It also considers how these management regimes exploit the economic and labour market conditions which originally determined their decision to invest in South Wales.

[1] Wales has the highest percentage of full time workers earning below 68% of average UK gross weekly earnings - the decency threshold set by the Council of Europe (Hetherington 1994). Moreover, in 1990, one in three of all full time workers in the region earned less than the Low Pay Unit's low pay threshold of £157 a week. In the same year, there were 216,500 such low-paid workers in Wales: 92,500 men and 124,000 women (Labour Research, April 1990).

CHAPTER TWO

JAPANESE LEAN PRODUCTION IN SOUTH WALES

If a distinctive Japanese transplant regime is perceived by its competitors as superior in terms of manufacturing performance and efficient capital accumulation, then that regime might be expected to catalyse organizational changes within the competing firms. Moreover, if some of the distinguishing features of the Japanese regime begin to transcend both sectoral and national boundaries so that a universal set of management practices emerges, then a more pervasive process of industrial restructuring might be anticipated. The opening chapter of this thesis suggested, however, that there exists little concrete evidence to substantiate such an elementary concept of 'Japanization'. In reality, the operations of Japanese TNCs are shaped and constrained by the same parameters which affect their competitors; parameters governing different production technologies, different product markets, different labour markets, and different industrial relations traditions.

So does this mean that there is nothing distinctive about Japanese management practice which would warrant further investigation? Is its influence restricted to the realm of ideological threat rather than material change at the workplace? Whilst disputing notions of universal management models, this thesis argues that, from the standpoint of those individuals who bring their labour power to the shop-floor of Japanese transplants, there are differences with conventional British factories,

differences of sufficient significance to engender a process of emulation and conflict within the latter.

The purpose of this chapter, and the next, is to explore the salient features of Japanese management practice in a specific UK region. Drawing on quantitative and qualitative data accumulated through a survey of Japanese manufacturing transplants in South Wales, the analysis seeks to establish exactly what is distinctive about Japanese work organization and employment relations in this region. Notwithstanding the above reservations concerning the validity of Japanese models, it also relies upon an ideal type-approach to structure the investigation. Therefore, the chapter considers those features of management practice most commonly associated with the 'Japanese model': the reskilled labour process; just-in-time and lean production control; flexibility, teamworking and other aspects of labour utilization; and total quality management (TQM) practices such as kaizen.

THE SURVEY

At the time of the survey, in 1994, there were 17 fully Japanese-owned manufacturing transplants based in the South Wales region[1]. Many of these are concentrated in the consumer electronics and electronics component sectors, although firms operating in the autocomponents and chemicals and plastics sectors are also present. Of these 17

[1] This figure excludes the small number of Japanese firms employing less than 25 workers.

firms, 15 agreed to participate in the survey and all of the above sectors were represented.

Tables 2.1 and 2.2 together provide an outline of these participating firms' products, principal markets and workforce composition.

The two tables indicate that, with the partial exception of Sony, these Japanese transplants are primarily manufacturing enterprises producing different consumer goods, components and materials for British and European markets. Perhaps the most striking aspect of their workforce composition is that although the firms employ few design staff - and some use sub-contractors for plant maintenance - on average, the number of indirect staff still amounts to 30% of the total workforce. Apart from management and administration, most of the latter comprised shop-floor supervision, industrial engineering and quality control personnel. The implications of this for the nature of management control over the labour process are explored in more detail below. For the moment, it should be noted that, despite dominant perceptions to the contrary, the 'flat hierarchy' and the principle of multi-skilled direct production workers taking on many of the tasks of redundant indirect employees are not characteristics of Japanese work organization[2].

[2] This observation is not based purely on the survey results in South Wales. Lincoln and Kalleberg's (1990) extensive comparison of employers' practices and employees' attitudes in Japan and America found that Japanese corporations employed twice as many supervisors as their American counterparts but fewer direct production workers relative to total employees. Overall, Japanese corporations had taller hierarchies than the archetypal, bureaucratically controlled American corporation.

Table 2.1, Principal products and markets of participating Japanese transplants

COMPANY	MANUFACTURING SECTOR	PRODUCTS	MARKETS		
			UK (%)	EU (%)	World (%)
Calsonic	Vehicles and Components	Auto radiators and heat exchangers	90	10	0
Aiwa	Consumer Electronics	Hi Fi and video equipment	35	65	0
Matsushita Electric	Consumer Electronics	Colour TVs, satellite receivers and microwaves	35	65	0
Sony	Consumer Electronics	Colour TVs and cathode ray tubes	25	55	20
Hitachi	Consumer Electronics	Colour TVs, video recorders and microwaves	20	80	0
Star Micronics*	Consumer Electronics	Dot matrix printers	20	80	0
Gooding Sanken	Electronic Components	Power supplies	11	26	63
Electronic Harnesses	Electronic Components	Wiring harnesses and degaussing coils	80	20	0
Yuasa Batteries	Electronic Components	Lead-acid batteries	40	60	0
Matsushita Electronic Components	Electronic Components	Transformers, line filters, chip resistors	80	20	0
Matsushita Electronic Magnetrons	Electronic Components	Electronic magnetrons	80	20	0
Sekisui	Chemicals and Plastics	Polyethylene and polypropylene foams	50	50	0
Dynic	Chemicals and Plastics	Thermal transfer ribbon, printed ribbon cassettes	20	80	0
Diaplastics	Chemicals and Plastics	Plastic panels	100	0	0
Takiron	Chemicals and Plastics	PVC corrugated and flat roofing	30	50	20

* In the autumn of 1994, after the survey was completed, and following the collapse in the market for dot matrix printers, Star Micronics closed its South Wales factory. According to the plant's GMB union, the company also decided to base its new overseas manufacturing operations in China.

Table 2.2, Workforce composition of participating Japanese transplants

COMPANY	TOTAL EMPLOYEES* (N)	DIRECT EMPLOYEES (N)	INDIRECT EMPLOYEES (N)	DESIGN STAFF (N)	MALE EMPLOYEES (N)	FEMALE EMPLOYEES (N)
Calsonic	701	390	311	96	600	101
Aiwa	980	666	314	0	330	650
Matsushita Electric	1650	1100	550	38	825	825
Sony	2750	2000	750	350	1500	1250
Gooding Sanken	233	166	67	6	73	160
Electronic Harnesses	150	130	20	0	45	105
Yuasa Batteries	640	442	198	10	630	10
Matsushita Electronic Components	251	211	40	3	100	151
Matsushita Electronic Magnetrons	40	19	21	0	36	4
Sekisui	80	50	30	0	76	4
Dynic	40	30	10	0	26	14
Diaplastics	205	150	55	0	115	90
Takiron	72	48	24	0	59	13
Star Micronics	206	165	41	10	69	137
Hitachi	800	600	200	50	400	400
Total	8798	6167	2631	467	4884	3914

* The total number of employees includes temporary workers. Separate figures for these are provided in Chapter Three.

Table 2.2 also displays a good number of workforces comprising a high proportion of women employees. Overall, women constitute nearly 50% of all transplant workers in the region although this figure obscures disparities across sectors and occupations. In particular, women are concentrated in the electronics sector where most are employed as bottom grade production operators. This gender segregation will be considered further below, and again, in Chapter Three.

With the exception of just one, the different transplant managements recognised trade unions. Their industrial relations policies are explored in Chapter Three.

WORK ORGANIZATION AND THE LABOUR PROCESS

The factors which impact upon corporate strategies governing the organization of the labour process are many. Consequently, any group of factories manufacturing similar products may sometimes display clear, sometimes subtle differences in job design. Nevertheless, most of the Japanese transplants organised their production on the principle of continuous flow assembly lines involving repetitive and monotonous task routines. These lines would be automated where batch size or standardised components made this feasible, otherwise, production relied principally upon labour-intensive manual work. Table 2.3 summarises this.

Table 2.3, Work organization by sector and company

MANUFACTURING SECTOR	COMPANY	WORK ORGANIZATION
Autocomponents	Calsonic	Automated robotic assembly lines. Cell organization, semi-automated/manual lines.
Consumer Electronics	AIWA	Automated component insert assembly. Manual assembly lines.
	Matsushita Electric	Automated component insert assembly. Manual assembly lines.
	Sony	Automated component insert assembly. Manual assembly lines.
	Hitachi	Automated component insert assembly. Manual assembly lines.
	Star Micronics	Automated component insert assembly. Manual assembly lines.
Electronic Components	Gooding Sanken	Automated component insert assembly. Manual assembly lines.
	Electronic Harness	Unitary workstations; semi-automated and manual assembly.
	Yuasa Batteries	Automated and semi-automated assembly lines.
	Matsushita Electronic Components	PLC automated technology. Unitary workstations, manual assembly.
	Matsushita Electronic Magnetrons	Automated assembly lines; PLC technology.
Chemicals and Plastics	Sekisui	Continuous flow processes utilising extrusion technology.
	Dynic	Unitary thermal transfer machines; unitary manual assembly workstations.
	Diaplastics	Unitary extrusion and flow line assembly.
	Takiron	Unitary extrusion machines.

Although all sectors are not equally represented, inter-sectoral differences can also be discerned in terms of cell-based assembly lines in the auto factory, conventional moving assembly lines in electronics and unitary machine layout in plastics. These differences are primarily a function of technological parameters and prevailing sectoral trends and traditions. The nature of the labour processes in the different transplants will now be examined, sector by sector.

Autocomponents

Calsonic is the only 100%-owned Japanese subsidiary operating in the auto sector in South Wales. The factory manufactures different types of heat exchanger units with a customer base spread across the European vehicle assembly industry. Unlike the other transplants in the survey, Calsonic is not a classic Japanese green field operation. Its Llanelli factory was formerly an old BL/Rover plant which underwent a management-employee buy-out in advance of the Rover privatisation in 1988. The Calsonic Group subsequently purchased the plant in 1989. However, despite this brownfield status - and the legacy of shop-floor control over the labour process which accompanied it - the combination of competitive market pressures and the emergence of a more compliant trade union organization weakened by almost continual threats of redundancy since 1988, facilitated a significant restructuring of work organization involving the implementation of just-in-time production control techniques and teamworking.

Looked at purely in technological terms of 'efficiency' and 'flexibility', this restructuring could be described as the substitution of continuous flow, cellular production for the more inflexible, dedicated machine layouts associated with 'Fordism'. The Calsonic management inherited an orthodox form of work organization based on the separation of machines and workstations into discrete functional areas or 'clusters' (Schonberger 1986). Gradually, cell-based teamworking replaced this arrangement allowing different machines and tasks to be grouped together by product family rather than single function. The different teamworkers also became more personally responsible for the quality of their work and more responsive to the just-in-time supply requirements of the customer.

However, these changes also had a major political dimension. Rather than introduce quixotic notions of 'ownership', 'self-management', or, as one writer has put it, 'the creation of little factories within a factory' (Turnbull 1986), the reorganization was aimed primarily at intensifying work rates and re-imposing managerial prerogatives. In particular, it resulted in the rationalisation of jobs, the removal of both formal and informal job demarcations and the dismantling of those production buffers which gave operators occasional breaks from the incessant intensity of production. Using classic work measurement techniques, teams of industrial engineers set about re-organising workstations, reducing the number of non-profitable process tasks, removing waiting times in stores and transit, removing factory floor pallet areas for temporary workstation storage and removing the stores themselves. What appears, ostensibly, as a series of quite mundane organizational changes had more profound implications for shop-floor operators. As one quality manager commented:

> Our style of working on the shop-floor has undergone quite a radical change as a result of all this. We've virtually got rid of all the old buffers which literally used to pile up shoulder high at every workstation. No longer do our operators work stop-go, stop-go, sometimes going flat out, sometimes taking a rest. It's now bell to bell, steady, continuous working - with the machines and technology driving the men rather than the other way around. It might not sound like much of a change but it's a big change for us I can assure you.

The introduction of teamworking did little to enrich the operators' work. During the processes of assembling, clinching and brazing the different metal rods, tubes and gills that comprise a radiator assembly, operators in the labour-intensive manual areas might rotate from one narrow task to another. But their work remained essentially fragmented and low-skilled. By comparison, in the factory's high volume automated areas, where assembly and brazing operations were performed by dedicated robotic-based technology, although the different teams of operators enjoyed higher status because they were employed on 'state of the art' technology, they also suffered deskilling. In effect, they were converted into unskilled ' line feeders' (Jurgens et al. 1993) with the sole responsibility of loading materials and parts into machine silos, magazines and fixtures.

This segmentation of production tasks had a significant gender dimension. The rationalisation of jobs in the labour-intensive production teams resulted in many women leaving the factory over recent years. At the same time, operators working in the automated areas enjoyed relative job security. The fact that the latter were all men was no coincidence. Stereotypical assumptions concerning 'natural' men's and women's skills contributed to a gradual gendering of the work process (Cockburn 1985). The management at this plant, like many interviewed elsewhere, believed

unquestioningly that women in manufacturing were only suitable for light, repetitious assembly work. Anything beyond this constituted entryism into traditional male territory. And at Calsonic at least, women were no longer perceived as cheaper than their male colleagues. As one manager put it:

> In a sense, fixing metal and materials on to jigs and large pieces of machinery is men's work isn't it? It's dirtier and requires more heavy manual labour. Also, rightly or wrongly, the women here had always been paid less than the men irrespective of function. But the effect of the Act [Equal Pay] was to make our women operators as expensive as the men. There was no longer a clear advantage to the Company in employing a mass of women. So, the new technology gradually came in. And male workers, who in any case were more used to working with process machinery, were recruited while at the same time our women gradually left through natural wastage and voluntary redundancy.

Consumer electronics

A similar dichotomy between capital intensive, automated component insertion and labour intensive manual assembly characterised the organization of production in the large electronic assembly transplants. The technological logic of this has been described in some detail by Taylor et al. (1991, 1995) and Delbridge (1995). Without exception, predominantly male operators were deployed in the automated areas, feeding and monitoring computerised component insert equipment used for mounting standardised electronic components into printed circuit boards. Female operators were then employed along conventional assembly lines for the more numerous and complex manual assembly operations which go into the manufacture of domestic videos, TVs and the like.

Patriarchal assumptions governing distinctions between 'men's work' and 'women's work' informed this division of labour as well. However, this was not the only factor. The mass exploitation of large pools of low-waged female labour from the ex-mining communities of South Wales provided major advantages to these different capitals in terms of minimising wage costs and enlarging surplus value. Matsushita Electric apart, where union organization was relatively strong and occasionally militant, most of the electronics plants in the survey operated an informal wage-setting cartel. As a result, most women employed as bottom grade assembly line workers earned just £140 per week gross compared to the £155-£170 plus shift premia received by their higher graded male colleagues.

In the automated areas, although the technology itself was complex, the male operators were again effectively reduced to little more than line feeders. Their daily tasks comprised loading basic PCBs, component ribbons and cassettes to machines; multi machine minding; picking up and re-loading dropped components; and feeding off finished work. Equipment breakdowns were the responsibility of skilled maintenance teams or local contractors. The work was boring, monotonous and degrading.

The same adjectives can be used to describe work in the main manual areas except that this was also marked by its exceptional speed and intensity. The basic labour processes were no different to those encountered in Cavendish's (1982) ethnography of life on an assembly line. Operators sitting at discrete positions along a conventional production line carried out a small number of repetitive manual

operations at rapid speed. Whether the task was component insertion, dry joint probing, mechanical assembly, final packaging, or whatever, the basic skills were the same: rapid component handling and perfect hand coordination.

Many operators appeared to the observer as highly charged automatons. At Matsushita Electric in Cardiff for example, experienced component inserters were expected to complete their operations on 10 boards per minute. Most cycles comprised fitting 8 components to a board. Thus, most of these operators were fitting 80 components per minute, more than 1 per second. And they did this continuously. The key difference between the labour process in these plants and traditional British practice - as outlined by Cavendish for example - is that bell to bell working means what it implies. The process allows no potential for creating individual buffers and informal breaks; talking on the line is a disciplinary issue; all tasks are value-added only so that extras, such as stopping work in order to change a component box, are allocated to line side feeders; and operators enjoy no short breaks during machine downtime, they immediately move on to alternative lines. Workers are asked to squeeze 60 minutes labour power into every hour. As one shop steward complained:

> Mind you, if the targets are constantly missed then the operative is taken to the desk. You get warnings from your supervisor and you're told that, "you're too busy talking", or, "you're looking around you too much and not concentrating". But sackings are rare. 95% of the poor performers are transferred to an easier department if there is such a bloody thing. So, the system is if you're caught talking and dreaming you're generally given a first formal warning and then you're moved. It's harsh isn't it? Some of the departments on the shop floor work under tremendous pressure. On the insertion lines and the control block lines you just haven't got time to blink.

Electronic Components

The organization of work in this sector followed no set pattern, although, like all other transplants in the survey, these Japanese electronic component suppliers displayed an invariable work intensity and sense of discipline on the shop-floor.

The diversity of job design and manufacturing technique was a function of quite different product and process technologies and specific market characteristics and traditions. At Gooding Sanken's new Welsh Development Agency greenfield site, for example, the shop-floor was again divided into automated component insertion and manual assembly areas. Here, however, fixed workbenches arranged as long assembly lines but without expensive conveyor belt technology, sufficed for the plant's low volume market requirements. The operators' labour processes again comprised repetitive manual assembly tasks whilst the intensity of work was dictated by fixed cycle times and tightly policed by shop-floor supervisors. Distractions from the task in hand, such as talking to workmates on the line, were a common occasion for reprimand and formal discipline.

The production process at Matsushita Electronic Components, near Swansea, did not lend itself to straight line or cellular assembly line principles. Manufacturing switching transformers and other similar components requires operators working at single workstations performing customary tasks, such as winding copper wires around metal cores, each hour of the working day. The skills employed here revolve around rapidity and consistency of hand movement. Similarly, at Electronic Harnesses, the efficient manufacture of wiring harnesses demanded a clustering of different work

processes and unitary machines instead of assembly lines. The labour processes of the predominantly female operators in this plant comprised rapidly feeding insulated wires and crimps into semi-automated cutting and crimping machinery - which the plant's personnel manager likened to sewing machines - along with wire layout, hand soldering and crimping. Rather than distribute task and ability on a rotational, 'multi-skill' basis, the work was fragmented in Tayloristic fashion so that each operator concentrated on her specific, narrow task.

Both Yuasa Batteries and Matsushita Electronic Magnetrons exploited more capital-intensive work processes. Since it was established in 1982, successive investments in automated process technology enabled Yuasa Batteries to manufacture around 5 million sealed lead acid batteries of different designs each year. Although this technology furnished the plant's 30 in-house maintenance staff with a number of new skills, the 450 process operators employed on the shop-floor were again reduced to mere machine feeders and minders. Indeed, the minimal skills required here allowed the company to recruit most of its workforce straight from local secondary schools.

Similarly, Matsushita's Electronic Magnetrons Cwmbran plant presented itself as a hi-tech 'factory of the future' on the basis of its total automation and integration of the manufacturing process. The factory employed just 19 direct operators who each day produced 7,500 magnetrons for the domestic microwave industry. The operators' labour processes were organised around 5 robotic workstations located along one line and each linked by a sophisticated enclosed conveyor system. Put crudely, operators fed the required materials and components onto conveyors at each workstation;

robotic equipment performed different press, clench and assembly operations; and on this cumulative assembly basis, every minute, 20 completed magnetrons appeared at the other end of the factory, ready for despatch.

Maintaining the same inverse relationship between automated production technology and operator skill observed elsewhere, the work was rudimentary, sometimes intense, but always demanding in the sense that workers had to survive the boredom of a monotonous and lifeless working day, week in, week out. Japanese managerial efficiency, combined with the exploitation of sophisticated new technology of a type that would enthral our contemporary business writers, had created a degrading, no-skill labour process. As the site production manager put it when questioned on labour flexibility:

> In fact, we rotate our operatives every 1 to 2 hours. This is not a requirement of the production process, it's purely for "job enrichment". The problem here is that the work is very boring on the line and if we leave an operative at a single workstation for more than a couple of hours then the work becomes so monotonous that mistakes can be made. In truth, without being disrespectful, we could train monkeys to do these jobs. The only skill involved is the use of a bit of aptitude when things go wrong.

Chemicals and plastics.

The management at the companies manufacturing foams, plastic mouldings and PVC products, Sekisui, Diaplastics and Takiron, stressed the lack of anything distinctively Japanese about the way work and technology were organized in their capital-intensive factories. Nevertheless, they did emphasise the importance of securing management control over labour deployment and maintaining the daily discipline and intensity of

production. The manufacturing systems in these factories incorporated different types of unitary extrusion machines on large batch, continuous processes. The operators' job design was also standard for this type of industry: feeding in raw materials, machine setting, multi-machine minding and feeding off the finished product were all customary daily tasks on the shop-floor.

At Dynic, a small Cardiff-based firm fabricating ribbon materials for computer printers, the labour process involved slitting ribbon material to size on unitary, manually controlled machines; or elsewhere, performing elementary assembly operations for the manufacture of ribbon cassettes. Again, apart from the intensity of work and the lack of union influence over this - which will be discussed later - the management stressed that compared to similar firms in the region, there was nothing unorthodox about the organization of the labour process on the shop-floor.

This chapter's remaining sections investigate particular management practices which govern the intensity of production, the deployment of labour and worker participation in reshaping the labour process. However, the significant preliminary point to emerge from the analysis thus far, is that the basic shop-floor labour processes in these South Wales manufacturing transplants have not been 'enriched' by the implementation of some novel Japanese work organizational paradigm. Without exception, production operators are employed in these factories on a variety of fragmented, monotonous and repetitive tasks in the interests of efficient capital accumulation. To close this section, the generally rudimentary, low-skill nature of this labour process is further

demonstrated by considering the extent and quality of training required for the operators to perform their work.

In keeping with the view that Japanese firms devote far more resources to training than their British competitors (Keep 1991; Pang and Oliver 1988), and assuming that this should represent something more substantial than 'on the job' or brief induction training, each transplant management was asked to what extent formal NVQ skills training was offered to operators on the shop-floor. Six of the 15 firms did provide such training, but with the exception of a small minority of senior operators, this only extended to the most basic NVQ Level 1[3]. Moreover, the absence of NVQ certification from the remaining 9 plants was not the result of parsimonious attitudes towards employee training; it merely reflected a more candid appraisal of both requisite operators' skill levels and the dishonest nature of contemporary state-funded youth training. As a Sony manager commented:

> Let's be honest. I know, and so to be fair do the operatives, that it is ridiculous to think that their jobs could be "NVQable". I'm greatly concerned that so many companies are offering this sort of NVQ training and claiming NVQ skills for so many jobs that just don't warrant them. It's an abuse of the system and the Government knows it.

[3] NVQ Level 1 certificates are awarded for 'competence in the performance of a range of work activities. most of which may be routine and predictable', but as the CBI has also advised, competence which is below the minimum reached by most young people who have completed youth training. (The NVQ Monitor, National Council for Vocational Qualifications, Spring/Summer 1994; 'Business Success Through Confidence', Investors in People, CBI, April 1991).

LEAN PRODUCTION CONTROL

Although the processes of just-in-time production control (JIT) are rarely researched in any empirical depth, the concept remains central to managerialist presentations of efficient, waste-free Japanese production practice. Schonberger (1982) places JIT at the heart of Japanese production management and defines it idealistically as an inventory control system where work and materials are constantly on the move, 'a sort of hand to mouth mode of operation characterised by stockless production'. Oliver and Wilkinson (1992) expand upon this by describing JIT as a waste minimising system which seeks to match production exactly to market demand. They go on to denote 3 conditions necessary for its operation: swift machine set-up times; simple unidirectional material flow; and the implementation of TQM practices. On the basis of their quantitative analysis of recent developments in the UK, these authors argue that JIT is now becoming common practice in manufacturing firms.

To what extent is JIT established in the Japanese transplants of South Wales? The real picture is more complex than the above analyses would suggest. Only 4 out of the 15 firms surveyed claimed to use a JIT system. And notably, this small number did not seem to be a function of any constraint in specific industrial sectors. Of the four, one JIT company operated in the autocomponents sector, two were in consumer electronics and one in plastics.

However, this does not mean that the remaining companies conformed to the opposing - and sometimes inaccurate - 'Fordist', 'just in case', high buffer, ideal type.

Many followed lean production strategies based on strict manning levels (which are considered in the next chapter) and reductions in both work in progress and stock levels matched with careful assessments of likely product demand.

Looking firstly at the JIT companies, both Sony and AIWA claimed to operate pure JIT systems, an unusual achievement for UK-based consumer electronics assemblers since a large proportion of the high value added electronic components are imported from the Far East. Over a period of 20 years, Sony developed its 'global localisation' strategy resulting in a fully integrated TV production plant at Bridgend. Key assemblies such as cathode ray tubes were manufactured in-house whilst reportedly, 90% of other components were supplied 'locally', that is, from the UK and other European Union countries. This complex network of suppliers delivered materials and components to the factory every 2 hours on average, some direct, some via local warehouses. The AIWA plant at Newport operated a more imperfect form of JIT since many of its electronics components were imported from the Far East. However, the company claimed to maintain close control over order schedules from its foreign suppliers - including detailed procedures for monitoring all supplier transport containers - to the extent that weekly shipments were possible, with daily supplies received just-in-time via port-based warehouses.

Calsonic's production control system was designed to supply the JIT requirements of Rover-Honda, Nissan and other prominent vehicle assemblers. The management at this ex-Rover plant described their system as far more stressed and tightly controlled than previous practice. In earlier times, the plant would receive a weekly order for a

supply of radiator assemblies which was rarely subsequently refined in terms of daily despatch requirements. Orders were received over the phone and casually adjusted over the phone if necessary. This loose form of control, along with large batch production and the prevalence of buffers on the shop-floor, created a relatively relaxed system of coordinating supply with customer demand.

Under the new regime, the systematic reduction of buffers and machine set-up times facilitated smaller batch sizes and a more precise JIT supply and delivery system. Calsonic's main customers provided fairly accurate monthly estimates of supply requirements and from these, bi-weekly and weekly forecasts were generated. Through interaction with the customer on Electronic Data Interchange, production planners were able to use these forecasts to issue daily shift production plans which incorporated any final day to day adjustments. From these, the planners established tightly controlled product despatch timetables, involving normally three despatches per day to each customer at different fixed times.

Calsonic's despatch arrangements with Nissan were typical. At precisely 7.00am, 7.45am and 3.00pm each day, a Nissan sub-contract driver would collect the exact amount of units from the Calsonic despatch bay in accordance with the day's production schedule. Within exactly 45 minutes, the driver inspected each pallet for correct part quantities and pallet installation, loaded the vehicle and signed for 'ownership' of the load. At 7.45am, the driver left the despatch bay, whether or not the complete order was loaded. Using classic time and motion measurement techniques, Nissan and its delivery contractors established optimum pick up times at

each supplier sufficient to allow transient storage at a large Nottingham depot. Upon completion of each 'milk round' of suppliers in the region, goods were off-loaded at Nottingham and physically divided into 4 daily time slots from which they were delivered just in time to the Nissan plant in Sunderland.

These critical despatch schedules intensified the stress of mass production on the Calsonic shop-floor. The system exerted a continual disciplinary pressure on the teams and shifts responsible for meeting the customer's quality and quantity requirements on time. Any team of operators failing to meet these requirements was expected to work on until such problems were resolved. If the deadline was still missed then Calsonic was forced to deliver free of charge to the affected customer. Consistent failures placed contracts and jobs in jeopardy. And of course, we are not talking about one deadline but a whole series of routine deadlines for each customer, each day.

Although the majority of firms surveyed did not operate such closely controlled JIT systems, they did attempt to tighten their production schedules and reduce work in progress and stock levels. For those transplants locked into long term, 'cooperative' supply relationships with the JIT assemblers, these objectives could be undermined by the ability of the latter to pass their costs down the supply chain. A number of managers spoke bitterly of this. One said:

> No, this company does not operate JIT. And exactly what is JIT may I ask? Who can define it, can you? I certainly can't. I believe the concept of JIT is an idea that has been blown up out of all proportion by the media and you academics. And it's all very well for the big final assemblers such as those in the auto industry to claim to work a JIT system, which they might

> well do, I don't know. But in fact, all they are doing is pushing their stock holdings down the supplier chain. And it's logistically impossible for all these suppliers to themselves run a JIT system. So at some early stage, one level of suppliers will have to pick up the bill by holding excessive levels of stocks.

And from a supplier to Sony:

> I don't know what system Sony operate. All I know is that their order schedules are unplanned and chaotic. We can't do anything else other than keep good stock levels with which to supply them.

Notwithstanding these countervailing pressures, most of the Japanese transplants still attempted to regulate their production costs by maintaining leaner production control measures. Every firm operated a system for generating monthly, weekly, sometimes daily estimates of likely sales demand. And this was often accompanied by procedures which secured management accountability for work in progress and stock levels. Sekisui provided a typical example where inventory levels had to be declared by all appropriate managers on a monthly basis. This normally amounted to a maximum of 10 days finished goods in stock, a maximum of 5 days work in progress and 5 days raw materials and inventories.

The ramifications of such dry accountancy measures can be profound on the shop-floor. As the case study of British emulation will demonstrate in Chapters 5 and 6, for the production operator, 'minimal human and material waste' in the form of low stock and low buffers, translates into no break or respite from the continuous grind of mass production. Indeed, lean production control, whether in the form of an idealised just-in-time or more prosaic forms of reducing inventory costs, constitutes a critical component in management's repertoire of measures which aim to close up the pores

of the working day. This is the more 'mundane' factor which unites the different approaches to production control within the Japanese transplants in South Wales.

LABOUR UTILIZATION AND THE NEW WORKING PRACTICES

The survey investigated the Japanese firms' use of those new working practices which seek a more efficient utilization of labour on the shop-floor. Practices such as teamworking and other labour flexibility measures. The survey results are summarised in Table 2.4.

Table 2.4, Use of new working practices

PRACTICE	NUMBER OF COMPANIES WHERE USED (N)	PERCENTAGE OF COMPANIES WHERE USED (%)
Teamworking	6	40
Customer philosophy	11	73
Flexible working, in principle	12	80
Job rotation	7	46
Use of floats	10	66
Operators involvement in job design	0	0
Operators responsible for SPC	1	6

Teamworking and labour flexibility

The concept of Japanese-style teamworking suffers from a distinct lack of clarity in definition. One of its pioneers has described the practice as the cellular organization of labour and machinery in accordance with continuous flow principles. Here, machines are grouped by product family rather than function and each team member is required to operate the different machines in turn, moving items through a processing

sequence, one piece at a time (Toyota Motor Corporation 1992). More accurate analyses of the Toyota system have reduced this idealised craft-based version to one of mere multi-machine minding, where operators working in discrete cells may be asked to operate more than one machine at any one time (Monden 1983). Other managerialist analyses have complicated things further by arguing that single process-based cells are also operable and may be used where large machines dedicated to particular functions are common, such as in a press shop (Alford 1994).

If the precise format of the typical team organization is unclear, at least most managerialist writers agree on its purpose. That is, teamworking simplifies factory material flow; it reduces work in progress; it minimises manning levels; and, on an ideological level, it mobilises a sense of quality consciousness and business orientation amongst team members (Oliver and Wilkinson 1992). Moreover, on the basis of primarily quantitative data analysis, many writers also agree that teamworking has become a prevalent facet of work organization within both Japanese and British firms in the UK (for example, IRS 1990; Oliver and Wilkinson 1992).

Unfortunately, what is missing from this type of discussion is a sense of shop-floor politics. Teamworking is constructed as a mechanism of workplace efficiency or as a mode of work organization which may be of mere 'technical interest'. The idea that it could represent a significant managerial instrument of labour regulation which critically undermines traditional shop-floor controls over the labour process tends to get glossed over. As indeed, does the possibility that by effecting a process of shop-floor fragmentation, teamworking weakens the collective articulation of workers'

interests so that it constitutes a 'hard headed anti-union strategy for shifting the balance of power further towards management, away from workers and unions'] (CAITS 1988, p.6).

How have the Japanese exploited teamworking in their South Wales transplants? In fact, as Table 2.4 shows, less than half of the firms surveyed operated teamworking as a distinctive form of *work* organization. Furthermore, only Calsonic, in the auto sector, organised production into ideal typical cells.

At this factory, small teams consisting of between 6 to 12 operators were given the responsibility of producing families of car radiator assemblies for specific customers. Each team had its own leader, an elite operator who represented the 'totally flexible worker'. The team leader was responsible for such matters as the multi-task development of all team members, labour deployment and team performance. The latter was also monitored openly by the use of a combination of digital and manual display boards showing production targets; production performance; defect levels; individual operator's task proficiencies; and, under the heading of 'team morale', individual absenteeism records.

Case study analysis would be needed to establish the extent to which teamworking in this plant changed worker attitudes. But on the basis of the survey investigations there was little evidence of self-management or worker 'empowerment'. The company maintained strict lines of accountability from teamworker to teamleader

to foreman to production manager; orders were received from supervision and strictly obeyed.

Nevertheless, it is ironical that this pre-war, multi-union site managed to organise a more fundamental restructuring of work organization than most of the greenfield Japanese plants in the survey. In fact, the crucial difference here is that much modular assembly work in the auto industry actually lends itself to a team-based organization rather than a conventional assembly line; and more importantly, competitive pressures within this sector are ensuring that established companies introduce the practice as a low manning, labour intensifying measure by purging the shop-floor of its traditional labour demarcations and controls.

In contrast, the greenfield transplants in the electronics sector had no legacies of shop-floor control to contend with. These companies continued to exploit rigidly fragmented labour processes organised along single, straight assembly lines in accordance with the traditions of this sector. Their teams merely constituted the total number of operators on the line, which could sometimes extend to above 50 workers. Their purpose was not to facilitate 'total flexibility' or 'self-management'. 'Teamworking' was a euphemism for the creation of organised units that could be held accountable for line output and defect performance. As a manager in one of the larger plants explained:

> We operate an informal team structure which might change even on a daily basis, but these teams are not organised for the purpose of team *working*, more for ease of communications and to provide a line of accountability to the team or line leader. The team might consist of

> around 10 operatives and each will be co-ordinated by line leaders who really take up the role of the traditional charge hands.

A majority of the firms surveyed, whether using team organization or not, were attempting to enlist their employees into a 'customer ethos' to ensure that individual operators meet the needs of downstream 'customers' (Delbridge et al. 1992). For example, a personnel manager at one company stated:

> Every one of our operatives is supposed to regard other operatives upstream or downstream of the line as customers. And his downstream customers are expected to, and will, create a fuss if the work they receive is not up to scratch. We've always supported this explicit customer philosophy promoting the "individual as customer" idea. Not only will operatives complain to each other about any colleague's poor work but they also register complaints, sometimes bitter complaints, with the Company Advisory Board.

This, of course, was a new workplace individualism presented from management's standpoint. In fact, the needs of the external customer were consistently brought to the attention of shop-floor operators through continual quality campaigns, communications meetings and kaizen. It is likely that workers did have a greater sense of responsibility to the customer and the market. But this customer awareness did not necessarily extend to social relations between workmates. For example, when quizzed about the 'block assurance' customer/supplier system supposedly operating at their plant, two stewards at Matsushita Electric commented:

> No way! How can we check our own work let alone other people's work? We haven't got any time. And the idea that you could give your own people a telling off for bad quality! You're joking! We're all on the same grade on the shop floor, we're all the same. If I were to turn round and give my mate a bollocking he'll just look at me and say "fuck off, who do you think you are?"

And on the idea of 'ownership'?:

> Ownership of work? You've got to challenge this terminology strongly. What's it supposed to mean? You only have the bloody unit in front of you for 2 seconds. So how are you supposed to own it?

There was no evidence, then, that the organization of workers into teams, in whatever form, acted to enrich the labour process. Even the practice of multi-tasking was confined to narrow limits. In line with many other inward investors in the UK, the Japanese transplants were more concerned to incorporate total labour flexibility into their employment contracts than to put this principle into practice (Peck and Stone 1992; Morris et al. 1994). Although over three quarters of the firms had full flexibility agreements with their trade unions, less than half operated any form of job rotation. For many operators, life on the line meant staying at the same position day in day out performing similar task routines. The only flexibility involved was in their ability to adjust these routines for different model changes on the same line. As a manager at Sony put it:

> Some of our women on the main CTV line might move around the line on occasions but this is unusual. The idea of operator flexibility here lies in their ability to handle different models on a daily basis.

When quizzed about the enriching potential of job flexibility and rotation, many managers expressed a candid cynicism. One commented:

> I believe that this idea of continual movement between tasks to enrich the work process is frankly a lot of bull shit. Most workers prefer to stay in the same spot most of the time. They prefer one continuous boring routine to a number of continuous boring routines. And most of all they prefer working with the same people.

Indeed, a similar view was expressed by a GMB shop steward:

> The GMB agreement is that there's no demarcation whatsoever on the shop floor. But in practice operatives do tend to stay on the spot doing the same job. The most common reason for moving around is when you're covering for absenteeism. It's not done for flexibility's sake. If you've got people absent from a busy line then the supervision will throw other operatives on. Many of our people don't like it mind, especially the older ones. When people have been doing the same job all their lives they get used to it. They regard the job as their job, it sort of belongs to them. So they hate being moved off it.

For most of these transplants, full functional flexibility and productive efficiency did not go hand in hand. Although many of the firms did employ 'floats', elite operators who performed any task upon request in order to cover for problems such as absenteeism, in most cases these constituted less than 10% of the shop-floor workforce. Maximising output and minimising waste formed the driving logic behind continuous, lean production. Concepts such as 'enrichment' and 'empowerment' just did not come into the equation. Production supervisors were held accountable for line performance and they knew from experience that they could extract more output from groups of operators performing the same daily tasks than from others who were continually switching lines.

Placing full flexibility into labour contracts therefore served two purposes. Firstly, it provided management sufficient flexibility in labour deployment to allow for absenteeism and fluctuations in product demand. Secondly, it legitimised the imposition of managerial prerogatives; and it suppressed the emergence of rank and file controls over the labour process in the form of skill and job demarcations, regulation of effort rates, and so on. And these principles of management-controlled

flexibility were not negotiable. One shop steward reflected on the activities of an unsuspecting young manager recently recruited at Matsushita Electric:

> He's an unusual character for this place. He actually went around the lines talking to the girls about their work and discovered that they were all bored stiff. He even asked me my opinion. And I told him that there's a large number of youngsters here who get bored easily and some of them might appreciate flexibility more than the older ones. But the supervisors are all completely anti-flexibility. They've got their efficient lines and they want to keep them.
>
> So this manager drew up a plan. He'd discovered some of the operatives were pissed off with doing the same job day in day out so he came up with these new job rotation ideas. I don't disagree with him, actually. But the management aren't going to allow it to happen. Rotation will affect efficiency and rejects. This guy's new so he's got a lot to learn. But the best of luck to him. He'll need it in this place.

Finally, a short note on machine maintenance. Nearly all of the transplants maintained a strict division between their skilled maintenance teams and their production operators. With the exception of Calsonic, operators were not responsible for any aspect of machine maintenance. Moreover, although there was some evidence of limited multi-skilling, the maintenance teams still preserved many of the traditional skill divisions between electrical and mechanical fitters.

Calsonic recently introduced a total productive maintenance programme. As a result, production operators became responsible for machine lubrication, machine cleaning and other simple maintenance duties. Although it was impossible to assess the impact of this venture on job satisfaction, the low-skill nature of the extra work ensured that the operators' labour processes were subject to task accretion rather than upskilling. Their work was also intensified. With no extra time allocated for completing these new tasks, the exertion of further labour, in the form of simple machine maintenance,

was substituted for the shop-floor's precious 10 minute wind-down period at the end of each shift.

Job Design

The Japanese work organizational paradigm is supposed to provide some space for direct production workers to participate in job design through such activities as statistical process control (SPC), kaizen and team briefings. Some writers build this aspect of 'worker democracy' into a post-Taylorist, flexible specialisation perspective which assumes that direct management control now has no place in factories characterised by the devolvement of decision-making to the shop-floor (Piore and Sabel 1984). Braverman's (1974) dichotomy between the conception and execution of tasks effectively becomes redundant.

However, not much evidence of this could be detected amongst the Japanese transplants in South Wales. The limited worker involvement in kaizen is discussed in the next section and the non-participative nature of team briefings in the next chapter. As far as monitoring and adjusting production line work through SPC is concerned, only two companies in the survey ever involved their operators in this. And one of these, Calsonic, was recently forced to cancel its SPC programmes due to worker apathy.

The role of the industrial engineer in these factories provides a more constructive indicator of worker involvement in job design. For, as Jurgens et al. have argued, 'no

job is more characteristic for Taylorism-Fordism than that of the industrial engineer, whose job is to prescribe in detail the times and motions which the workers should use when performing their work' (1993, p.19). To what extent had the work of these engineers altered or even become redundant in the supposedly 'democratic', post-Taylorist Japanese transplants?

The answer was very little at all. At all of the larger plants, teams of industrial engineers were employed to carry out routine work measurement utilising traditional time and motion studies. These were used in customary fashion for setting targets, for line balancing and for cost and benefit analysis. At AIWA for example, one industrial engineer was employed for every 30 operatives. In fact, for most of these firms, it takes some imagination to envisage how matters could be any different once production tasks had become so fragmented and shaped by the exigencies of the continuous flow production lines. However, the irony here was the extent to which some of these Japanese managements resolutely rejected any worker input into job design. For example, a personnel manager at Electronic Harnesses stated firmly that:

> Company procedures govern the way we organise work. Indeed, the company highly disapproves of the idea of allowing workers to change methods by themselves, this practice is just not accepted. All operatives must comply with the company procedures.

And at Gooding Sanken:

> The idea of workers designing their own jobs is frowned upon. Individual innovation with regard work design is most certainly not the company philosophy here. Its our Japanese managers who are responsible for establishing all work procedures.

At Calsonic, teams of industrial engineers formed key personnel in the firm's 'management-led kaizens' in which managers and engineers, rather than operators, designed and implemented major adjustments to work organization. Conventional time and motion techniques were applied here. In a recent and typical exercise examined in some detail by the author, the engineers attacked production line buffers in one area by reducing non value-added process steps from 66 to 37 operations; manning levels decreased from 80 to 74 operatives; and 'drumbeat' production throughput increased from 2.35 units to 2.8 units per man hour.

Such productivity improvements were clearly a function of both improved capital and labour utilization and labour intensification. And as practical exercises in the systematic increase in the rate of extraction of surplus value, they will always run counter to the interests of shop floor operators. However, the fundamental difference between this industrial engineering process and traditional British practice is that the former is not subject to trade union control or influence. Not one transplant sanctioned any trade union input over the setting of standards or work reorganization. One ex-British Steel shop steward, now employed at Matsushita Electric stated:

> They stand over the operative for half an hour, or an hour maybe, timing the job and then they make a calculation for the whole 8 hours. But it's a different ball game when you're knackering yourself trying to keep to these standards for 8 hours a day.
>
> I just find it all extraordinary here. I mean, it's impractical. You go flat out for one hour, you can't help it when you're being watched, when there's someone looking at you, right over your shoulder all the time. And then they expect you to keep this up for 8 hours a day. They're impossible targets most of them.

And trade union influence?

> At British Steel, when we had the big time and motion studies, the shop stewards always participated to make sure the whole thing was fair and above board. And the management would always ask our permission first! But here the whole thing is indiscriminate. Ask our permission my arse! The time and motion people just suddenly appear and we're not even allowed to watch them. Okay, we might complain about a target here and there but you never get any where. The company never allows us to see the records and measurements.

The targets established by these studies were rarely employed in conjunction with individual bonus systems. They were certainly used to establish line performance targets and to facilitate line balancing. But it was more than this. The untrammelled process of industrial engineering could sometimes be effectively exploited to assert management control in both a highly symbolic and absolute fashion. The same steward again:

> But it's strange, weird really. They know full well we can't reach some of these targets. It's just stupid. They seem to take more satisfaction in the work study findings, in the actual work measuring than they do in us reaching their impossible targets. They just like the watching. There's nothing worse than having someone standing over your shoulders all the time knowing they're watching your every move.

Bell to bell working

> I must admit, coming from British Steel I was astounded by it at first. What it boils down to is that in a Japanese plant your life is controlled by a buzzer.

Few analyses of Japanese working practices dwell to any extent on the simple discipline of bell to bell working. Yet the manner in which this is imposed on transplant workforces makes it one of the more obvious manifestations of the

Japanese obsession with reducing idle time and squeezing out 60 minutes of useful work from every worker in every hour.

Every one of the firms in the survey practised this down to the letter, using bells or sirens to announce the beginning and end of each break. Typically, workers were granted two 10 minute tea breaks and one half hour lunch break each day. Observations at a number of plants during break periods highlighted exactly how precious these few minutes were. If the Japanese managements wanted their 60 minutes of work every hour, then similarly, operators were forced to scramble around to ensure that 10 minutes eating, smoking and resting time could be extracted from every break. A number of times, at the moment when the break bell rang, affected groups of operators would immediately drop tools and race each other to the canteen, as if in a 100 metres Olympic final. This appeared to the observer as a kind of 'McDonaldised' break system (Ritzer 1993) taken to extremes.

Operators who did not report back to their workstations at the end-of-break bell, or who did not seek permission to visit the toilet during work periods, would be immediately subject to the disciplinary procedure. But some managers were not even satisfied with this. At Matsushita Electric, for example, until 1990, two sirens would be sounded for starting work. The first came 3 minutes early as a warning. Workers were supposed to return to their workstations in preparation for the second siren. But more often than not, they would cram a final coffee or cigarette into the last 3 minutes and race to their workstations 30 seconds before the second siren. But Matsushita resented this. During the Cardiff plant's 1990 pay negotiations, management refused

to offer its shop-floor a pay rise unless operators agreed to report to workstations, and be ready to commence work with tools in hand, immediately upon hearing the first siren. With bitterness, the workforce was forced to donate to the company 3 minutes break time, that is, 9 minutes a day, 45 minutes a week, in order to receive a cost of living wage increase. It is this order of 'attention to detail' which tends to separate the Japanese from many British manufacturers.

TOTAL QUALITY MANAGEMENT PRACTICES

Product and process quality concerns were integral to the manufacturing philosophies of the different transplants. Many managers stressed that whether or not specific quality assurance mechanisms and structures were in place, quality was seen as the hallmark and a central philosophy of the firm. They also believed that the concept of continuous improvement formed part of everyday thinking in the office and on the shop floor.

In most factories, this philosophy was embodied in the vast array of quality campaign banners, slogans, charts and symbols that were encountered wherever one walked on the shop-floor. The AIWA plant at Newbridge provided a typical example. Shop floor trade unionists had to endure the presence of a large embroidered banner, fashioned in trade union style, overhanging the main shop. It was decorated with symbols such as the Welsh Leek and the Polaris star, which, as a personnel manager explained, signified that 'the plant is to be the guiding light for all of AIWA's global

factories. We aim to meet these productivity and quality challenges and become AIWA's leading plant'. This corporate ideology supported the company's ACE 95 campaign - AIWA's Challenge for Excellence - which, as the workers were continually reminded through a plethora of posters, banners and briefings, demanded that they exceed all production targets by 150% and reduce product defects to below 1%.

Different TQM[4] mechanisms give practical expression to the concept of continuous improvement. The extent of their use in the South Wales transplants is summarised in Tables 2.5 and 2.6. This section will focus upon kaizens and quality circles.

Table 2.5, Use of different quality improvement practices

QUALITY IMPROVEMENT PRACTICE	NUMBER OF FIRMS WHERE USED	PERCENTAGE OF FIRMS WHERE USED
Kaizen	5	33
Quality Circles	5	33
Kaizen/QC Conferences	2	13
Suggestion Schemes	3	20

Table 2.6, Companies using kaizens and quality circles: organized times and participation rates

COMPANY	KAIZEN/QCs HELD IN COMPANY TIME	KAIZEN/QCs HELD IN WORKERS' TIME	PARTICIPATION RATES
Calsonic	Yes	Yes	40%
AIWA	No	Yes	Majority
Matsushita Electric	Yes	No	Supervision only
Sony	No	Yes	Majority
Hitachi	Yes	No	Figs unavailable
Electronic Harnesses	Yes	No	Supervision only
Matsushita EC	Yes	No	Supervision only
Sekisui	Yes	No	100%
Diaplastics	Yes	No	Figs unavailable
Takiron	Yes	No	Majority

[4] Total Quality Management is an idea, indeed, a philosophy, which involves delegating responsibility for both product and process quality and meeting the customer's needs to the whole workforce.

The terms kaizen and quality circle were often used interchangeably by the different management interviewees despite the more precise, separate definitions in the literature. Kaizen is both a philosophy and a specific concrete practice for involving workers in quality improvement. As a philosophy, it stresses a new pro-enterprise attitude which is based on a consensus between managers and workers of general support for continuous improvement at the workplace and, in particular, for the development of a consistent process-oriented way of thinking (Imai 1986). In practical terms, this may mean involving the whole workforce in small group activity which seeks gradual improvements to the efficient operation of different production processes. Quality circles also comprise small groups of employees, normally led by a teamleader or supervisor, who meet voluntarily to improve quality and productivity in their own area (Oliver and Wilkinson 1992). Therefore, as far as the institutional mechanisms of continuous improvement are concerned, the kaizen group is little different from the quality circle.

Kaizens and quality circles are also mechanisms of labour exploitation. Under the cloak of a benign 'one team' ideology, workers become involved in securing for their employer higher levels of capital and labour utilisation, reductions in idle time, an intensification of labour and a more sophisticated form of worker subordination. They do this by apparently offering to management knowledge of those facets of individual tacit skills and customary practice which provide workers with the means to exert some control over the labour process. Therefore, kaizen and quality circles act to convert rank and file control into management control: 'the company has an ambiguous, but inescapable, relation to worker know-how; it is at once a threat to the

company, for it can lead to worker-control-in-work, but when rendered generalisable through the imperative that everything belongs to the company, it becomes a boost to the enterprise' (Garrahan and Stewart 1992, p.76).

Although the outcome of such a system might still reproduce a classic separation of conception and execution of tasks - since 'kaizened' production work remains highly fragmented and repetitive - the process of worker participation may, nevertheless, represent a marked shift from Taylorism, since workers themselves are acting as 'little industrial engineers'. To what extent then, did the workers in the Japanese transplants in South Wales participate in their own exploitation in post-Taylorist fashion?

As Table 2.5 shows, two thirds of the Japanese firms ran some form of continuous improvement group although only two of these operated the full structure of local groups reporting to factory level conventions. Most just met at the shop level, regularly reporting their deliberations to lower management. However, Table 2.6 indicates a less impressive picture. Participation rates were variable to say the least, with three of the firms restricting kaizen activity to supervision only. Two firms, Matsushita Electric and Yuasa Batteries, originally organised plant-wide groups but these were eventually disbanded due to a lack of interest on the shop-floor. A third, Electronic Harnesses, put a stop to full participation because of management fears that employees were straying beyond their remit. One manager stated:

> Our Japanese management felt that too much of the group discussion was directed towards wider issues such as production engineering and working practices, and wider corporate issues such as pay or management. Insufficient time was spent on quality issues, improving

> product quality, in other words real continuous improvement. The management felt that these groups should be discussing quality and nothing else.

Moreover, in some firms, particularly the smaller enterprises, the kaizen/QC groups tended to be informal affairs with little of the organization and accountability suggested by the literature. Nevertheless, full kaizen activity appeared to be operational in at least a number of the larger manufacturers. Calsonic, in the auto sector, was one of the more dynamic of these.

Calsonic operated kaizens at two levels. Management-led kaizens dominated by senior managers and engineers were responsible for all substantial work reorganization. An example of this activity was outlined in the 'job design' section above. At a lower level, the company organised 40 kaizen groups, each comprising between 4 to 8 members, to discuss small scale continuous improvements. Significantly, management interviewees reported that this initiative came from a number of British managers and that the idea of using participative kaizen techniques in the Llanelli plant was initially met with a lack of interest from the British-based Japanese managers.

These worker kaizens were controlled by management-appointed facilitators. They were responsible for monitoring and shaping the 3 key stages of the kaizen process: brainstorming, data analysis and adoption. Brainstorming is consultancy-speak for problem identifying which was described as the freewheeling of ideas, 'encouraging people to come up with ideas from the top of their heads whilst under a state of

enlightenment'. But for some, this state of enlightenment too often drifted into disenchantment. As one manager stated:

> The operatives have taken to brainstorming of sorts but most kaizens I've attended, and that's quite a few, have tended to generate into slanging matches which tend to put people under pressure.

Once ideas were 'thrown up into the air' and recorded, each group went through a 'democratic' voting process to prioritise the most practical suggestions. The groups met in company time but once suggested improvements were prioritised members often worked in their own time to collect and analyse data and to formulate countermeasures to each problem. The maintenance of strict documentary procedures allowed management to monitor the process at all times. The end results of this kaizen activity would be presented to senior management and if approved, implemented and proceduralised.

Does such worker behaviour represent a break from Taylorism? None of the kaizen groups in any firm in the survey were involved in fundamental aspects of work design. At Calsonic for example, kaizen produced incremental improvements in matters such as component rejects and small process hold ups, but this did not represent essential industrial engineering work. And although Graham (1994) describes a process by which American operators working in a Japanese auto transplant come to perform time and motion studies on their fellow workers after being trained in the techniques of industrial engineering, there was little evidence of such activity in South Wales. In one instance, where an enterprising worker attempted this at Calsonic, his colleagues reacted with a predictable sense of shop-floor solidarity. A quality manager:

> Sometimes there's been more opposition from the shop floor. Its still the case that only 40% participate in the groups but we've also had more specific problems. For example, during one kaizen exercise an operative got out a stop watch and timed the activities of his colleagues. If an industrial engineer had done this there would not have been a problem but because he was an operative it caused an outrage. He was sent to Coventry by the whole of the shop floor and as far as I'm aware he still is. However, he's a big lad. He can handle it.

Overall then, the evidence from South Wales suggests that this 'partially autonomous form of worker participation' represents less the reversal of the Taylorist emphasis upon the specialist engineer (Wood 1989) and more, as Wood himself also admits, strict management supervision of limited worker involvement in perfecting task routines after which workers are 'returned to Taylorised jobs'. The Japanese manufacturers in the region sometimes differed in their approach to reaching this latter objective. The Calsonics, the AIWAs and the Sonys allowed their workforces a hint of autonomy in the process of proceduralising work routines whilst other firms would sanction no worker input at all. But in all cases, the outcome was the same: fragmented tasks, tightly supervised work routines, minimum waste, and maximum levels of output from a minimum number of low paid workers. Therefore, as Thompson (1989) observes, such mechanisms of employee participation hardly constitute meaningful forms of workplace democracy or job enrichment. Neither do they undermine the processes of direct management control: 'certainly, the delegation to workgroups of some immediate and localised production decisions, such as those on the monitoring of product quality, can happily coexist within managerial structures of directive control' (1989, p.226).

To conclude this chapter, the survey data demonstrate that a distinctive, post-Taylorist Japanese work organizational paradigm has not been gradually installed along the South Wales valleys. Although some plants displayed a number of the salient features commonly associated with Japanese management practice, not one conformed with the idealised 'Japanese model' which stresses enriched, multi-skilled labour processes, self-managing workteams, total flexibility, and opportunities for full worker participation in job design and process improvement. The survey was not equally representative of every major sector in which Japanese manufacturing firms operate. This was due to the clustering effect of electronics plants in this region. Nevertheless, with four sectors at least partially represented, one would expect to discern some evidence of an emergent paradigm assuming such an entity existed outside of academic textbooks.

The Japanese transplants did not display fundamentally different characteristics from their market competitors because even if their managements were disposed to experiment with different work organizational forms in unfamiliar environmental conditions, intense global market pressures do not provide the necessary space for such innovation. Moreover, the presence of the Japanese in South Wales and elsewhere in the European Union is primarily a reaction to the rising value of the yen and EU market protectionism. The logic of their capital accumulation strategies in these circumstances will always be to efficiently exploit these markets to the full rather than venture into new 'empowering' labour processes and employment relations.

However, this author is not arguing that the predominantly young workers in these Japanese transplants have the same employment conditions experienced by previous generations of British manufacturing workers. Some things have changed. In the economic and political environment of footloose capital, mass unemployment, weakened trade unions and a pusillanimous left politics, many Japanese inward investors have succeeded in exploiting their greenfield sites by eliminating traditional rank and file controls over the labour process. Thus, as Tomaney (1990) has argued, these firms have merely extended and redeveloped existing forms of labour control and efficiency maximisation. And although these changes might constitute 'rather more mundane management priorities than is generally applied by references to Japanization' (Elger and Smith 1994b, p.48), as we shall discover in Part Two of this thesis, the workers on the receiving end of this less fundamental 'management of change' might nevertheless be forgiven for viewing such developments with some trepidation.

This is what unites Japanese manufacturing practice in South Wales. Despite the complexity and variance in work organization resulting from the different sectoral contingencies and traditions, the Japanese transplants, as employers of shop floor operators above all else, are collectively driven by an ethos of 'management by detail'; that is, of little details such as labour utilisation, labour discipline, labour control, labour cost and so on. These employers have acted to extend the leverage they maintain over worker effort by the tight coordination and control of fragmented assembly tasks; by running more highly stressed lean production control systems; by eradicating union controlled job demarcations; by refusing to countenance union

influence over job design and work rates; and by exploiting sophisticated *direct* control systems which act to enhance operator performance in terms of output, quality and attendance.

The next chapter considers the extent to which these highly disciplined production regimes are supported both by ideological measures seeking worker cooperation and commitment and by systems of non-adversarial industrial relations.

CHAPTER THREE

JAPANESE HUMAN RESOURCE MANAGEMENT IN SOUTH WALES

This chapter explores the demands which Japanese lean production places on the management-labour relationship. It considers the extent to which distinctive human resource management policies provide a supportive framework for sustaining the intense exploitation of those who labour under Japanese transplant regimes in South Wales. In this context, the term 'human resource management' (HRM) is preferred to traditional 'personnel policy' because it denotes 'not just a capacity to think strategically but some distinctive view of the strategic direction that should be pursued (Guest 1991, p.42).

Managerialist writers and organization theorists tend to present this strategic direction in terms of an explicit articulation between Japanese JIT/TQM ideal types and HRM policy. For example, Oliver and Wilkinson argue that the fragility and high dependency relations characteristic of lean production systems 'demand a workforce that is dependable, hard working, flexible and unlikely to disrupt production' (1992, p.331). And the point is often made that Japanese management cannot be understood without considering 'hard' systems of production control together with 'soft' systems of employee motivation and management leadership. As Trevor has put it, 'those who

look only at either the 'hard' or the 'soft' are missing the point. 'Hard' and 'soft' are not opposites but the two sides of the same picture; and they both serve the same company ends' (1988, p.143).

However, there are three problems with these functionalist arguments. The first, as outlined in the previous chapter, is that the notion of a paradigmatic 'empowering' Japanese production system, which the new HRM policies are supposed to complement, does not correspond with the more varied, contingent, but essentially Tayloristic, work organizational forms found in South Wales. The second is the assumption that 'soft' personnel management is not only the clever solution, but the only solution, to the labour problems thrown up by 'hard' production management. No consideration is given to the possibility that in an environment of mass unemployment and weak trade unionism, 'hard' personnel management can be both cheaper and more effective. Thirdly, these new management systems are often treated as if they operate in a political vacuum, as if all management priorities and values are uniform, and more fundamentally, as if workers are mere objects, units of labour, with no capacity to resist management strategy.

In attempting to explore these questions further, this chapter provides a critical overview of Japanese HRM policy in South Wales. It investigates the various management practices which seek to secure worker compliance with the dictates of lean production and the extent to which these provide a 'fit' with the transplants' labour control strategies. It also considers their relationship with such broader factors

as local labour market and industrial relations traditions, and how the firms endeavour to exploit the latter to advance the accumulation of capital.

RECRUITMENT, SELECTION AND PERFORMANCE EVALUATION POLICIES

The use of more rigorous and systematic recruitment, selection and performance evaluation procedures appears to be a growing phenomenon in the UK, especially for certain sections of the workforce, such as shop-floor workers, for whom this has not previously been the case (Townley 1991). This development is often assumed to be a corollary of management's need to develop sophisticated monitoring procedures in the context of more flexible and autonomous work groups. However, although this may be partially true of the IBMs of this world, and other such companies with distinctive corporate cultures, for many others changes in recruitment policy should be viewed in relation to the mass unemployment of the 1980s and 90s. In this environment, management's demand for prime candidates from mass applications, and its interest in employing shopfloor workforces of sufficient quality to withstand the pressures and disciplines of intensified production systems, become entirely logical. It should also come as no surprise that Japanese firms in the UK have become adept at exploiting different types of recruitment and appraisal practices, each tailored to the needs of individual firms, but displaying uniformity in their aims of securing labour compliance, discipline and at least formal flexibility.

The Japanese transplants in South Wales are no different. Although no obvious association between particular recruitment policies and firm sector or plant size could be discerned, the various practices followed stood in clear contrast to the more casual hire and fire systems characteristic of many British firms in Wales (Morgan and Sayer 1988). The Japanese managements systematically assessed worker attitudes and performance either during protracted selection interviews or by subsequent careful surveillance of probationary and temporary labour. Similarly, once recruited into the permanent workforce, many employees in these plants were subjected to systematic supervisory evaluation of their shop-floor conduct.

Selection practices

Calsonic's procedures exemplified one of the more thorough multi-stage screening processes investigated. Decent jobs are both scarce and precious in the area surrounding the plant's Llanelli location. Consequently, as one manager bluntly put it, 'any one vacancy receives mountains of application forms which are then vetted to filter out the rubbish'. Selected interviewees must then overcome a daunting series of obstacles in their attempts to secure paid employment. Preliminary interviews assessed basic character and aptitude; more strenuous ASE-NFER Nelson tests measured numerical, verbal, non-verbal and spatial abilities; extensive interviews with functional and line management judged character and conduct against key selection criteria; and following this, candidates often endured yet another aptitude test. This brownfield auto sector company was leaving nothing to chance in its attempts to reshape and control its shopfloor culture. Indeed, at the time of the survey,

the company was on the verge of introducing a further hurdle in the form of a 16 point personality test.

The selection process for the line feeders at Matsushita Electronic Magnetrons was equally measured and protracted. In addition to a similar series of interviews and both manual and aptitude tests, applicants are enticed into revealing their true selves during informal walkabouts around the factory. Here, supervisors engaged them in apparent 'friendly chat' whilst noting their attitudes to work, commitment, flexibility and so on. As one manager put it:

> What we are looking for here is the whole person, correct attitudes, people who will fit into our team ethos. And crucially they must be reliable people, reliable characters, the types you would expect to have a good absenteeism record.

Not all of the firms utilised these relatively sophisticated techniques, however. Many relied upon more rudimentary recruitment procedures. Nevertheless, by exploiting both probationary systems and temporary labour they were able to reach the same objective of securing recruits with acceptable work attitudes and adequate performance and attendance records. For example, applicants for line operator jobs at Matsushita Electric in Cardiff undergo just a brief interview and two basic aptitude tests. The first of these was a simple colour recognition test. The second crudely assessed manual dexterity. Applicants were given 20 metal washers and observed and timed whilst they rapidly placed these over a matrix of pins protruding from a wooden board. It was by monitoring probationary labour - and more recently temporary labour

- that the Matsushita management were able to assess character and performance in a more measured way. One personnel manager said:

> To give you an idea of the selection process, we handled the last 100 applicants for the latest batch of temporary vacancies in one Friday afternoon. It's when we've got them as temps that we monitor their performance. That's basically, timekeeping, attitudes and work standards. Good performers are kept on, the rest are discharged.

The traditionally intimate nature of the Welsh valley communities, and the ways in which this sometimes placed character development under overt scrutiny, allowed some managers to put more informal procedures into play. At the Sekisui plant near Merthyr, for example, no formal recruitment policies existed. Instead, these matters came under the sole control of the plant's paternalistic deputy managing director who made his selection decisions purely on the basis of his first hand knowledge of local people:

> For most of the jobs we have on offer I only recruit individuals from the local community here and I only recruit people who I myself know [said with a wry smile]. I'm not embarrassed about this, it merely reflects the close-knit nature of out local Welsh communities. And what's more, I'll only recruit blokes with a good steady attitude. I will not take on militants and extremists. I'm only interested in good family men, men like carpenters and builders.

The selection criteria employed by these firms are shown in Table 3.1. These criteria do place as much emphasis upon behavioural characteristics as technical skills; but they were not used in the 'soft HRM' sense as part of a subtle monitoring process of autonomous work groups (Townley 1991). Instead, attributes such as positive attitudes to flexibility, work commitment and above all, timekeeping, were integral to

the Japanese managements' demand for raw recruits who might more easily adapt to the stress and disciplines of intensified production.

Table 3.1, Selection criteria

SELECTION CRITERIA	NUMBER OF FIRMS CITING CRITERION	PERCENTAGE OF FIRMS
Youth	5	33
Dexterity/basic elect-mech skills	11	73
Attitudes to flexibility and team ethos	11	73
Prepared to work long hours	7	47
Absenteeism and timekeeping	14	93
General work attitude and commitment	10	66
Education	2	13
Domestic background	4	26

Despite some firms' application of a plethora of aptitude tests described above, few sought new recruits with specific manual skills. This was clearly a function of the low skill nature of the labour process. Male workers employed as machine minders might be asked how they would go about changing the oil in their car, whether they liked tinkering about with machines, or whether they possessed any DIY skills, but that was the limit to the technical proficiency required. Young women with experience of rapid light assembly work in the clothing industry might be preferred for recruitment on to the electronic production lines.

One third of the firms surveyed cited youth as an important criterion[1]. This was particularly apparent in the larger firms operating in electronics and auto component production where, traditionally, trade unions have been well organised and

[1] On the basis of pure observation, this youth criterion appeared to be under-reported. Many of the factories visited employed large numbers of young workers, most in their late teens and early 20s, which suggests informal if not formal age discrimination practices.

independent. For these firms, the recruitment of young workers constituted an important prerequisite of a workforce socialisation process aimed at securing compliance and even the acceptance of managerial prerogatives. This was a prime objective at the brownfield Calsonic plant, for example, where the majority of operators were aged over 40. Here, the plant management engaged itself in explicit attempts to undermine collectivist attitudes and workers' rights by, as one manager said, seeking 'flexible, committed workers who are prepared to work long hours and accept new ideas'. As the first stage towards achieving this, the company now operates an age bar restricting shop-floor recruitment to those aged under 25.

However, these profoundly ageist policies were not always congruent with the Japanese obsession with maintaining a highly disciplined and committed workforce. As Morris et al. (1994) discovered, the earlier Japanese investors in Wales encountered significant labour retention and utilisation problems arising from their mass recruitment of undisciplined young school leavers. It is for this reason that many Japanese managements in South Wales now prefer to recruit younger workers who also display some evidence of responsibility and discipline. Thus, many managers emphasised their preference for married men aged between 20 and 30 whilst stability in previous employment was a key criterion for young women.

Life on the shop-floor in these Japanese plants is harsh, regimented and stressful. Continuous, lean production means what it implies. But if it is not to be subject to continuous disruption, this form of production also demands a good degree of labour retention. Therefore, questions of labour turnover and absenteeism became paramount

concerns for production management and explained why the demand for workers with acceptable timekeeping, attendance and work attitudes featured so strongly in the selection criteria. Indeed, many of the management interviewees reported regular recourse to formal disciplinary procedures to ensure that these attributes are maintained. But in most companies, exploitation of temporary and probationary labour served as the most effective filtering mechanism. New recruits who found it difficult to accept the disciplines of attendance were abruptly shown the door if they had not already voted with their feet. As a manager at Electronic Harnesses admitted:

> The company is willing to be patient and wait for certain improvements in operatives who may be lacking in skill but we're a lot firmer with anyone who dislikes the company culture and the way we're used to doing things. I've got to admit, we do have some problems here. The Japanese managers run this factory as a highly disciplined regime. They frown upon operatives talking to each other too much, they greatly discourage people taking time off the section, operatives always have to seek permission to go to the toilet, for example. As a result, the shop-floor often get annoyed and irritated, they get fed up with being treated like children. A lot of the new women just can't handle it. Many of them leave during the probationary period.

Equal opportunity policies

As notions of 'empowerment' and 'egalitarianism' are salient features of Japanese employment ideology, one might be forgiven for assuming that Japanese firms take leading positions in supporting equal opportunity policies aimed at eliminating various forms of workplace discrimination. The reality in South Wales was somewhat different, however. Of the 15 firms which participated in the survey, only 5 managed to produce a simple equal opportunities statement. More pertinently, none of these

firms developed working procedures aimed at implementing the principles outlined in their statements.

Not one of the management interviewees regarded equal opportunities as a particularly important issue and few understood the term as one which addressed structural forms of discrimination. In most cases, the question was met with a blank face, followed by silence. One manager typically remarked that, 'equal opportunities should be a natural practice rather than something which is formalised, not something run by procedures which you are forced to think about'.

As far as both labour market and job segregation by sex are concerned, Japanese employment policies in South Wales clearly replicate and reinforce existing employment traditions in the region's manufacturing industry. Male workers tended to concentrate in the engineering sectors, involving mechanical work and process machinery. Women predominated in the electronics assembly plants. Similarly, as the previous chapter outlined, a clear intra-plant segregation between male 'machine operators' working on automated equipment and female manual assemblers obtained.

Furthermore, female operators tended to be trapped in the lowest shop-floor grades, earning around £140 per week. Few were able to break out into supervisory, let alone management positions. For example, at AIWA, where women constitute 66% of the shop-floor workforce, just 3 women reached the supervisory grade. None had achieved management status. At most plants, managers attributed this to a lack of assertiveness and disinterest in career making. One typically commented:

> I don't believe that many women want to get on in manufacturing industry. We get little enthusiasm from the girls when we do our career tours at the local schools...and the many women we do employ don't want to get above the level of supervision anyway. They don't want more than this because of their responsibilities at home with the housework.

However, in her analysis of the experiences of women workers in Japanese electronic plants in Wales and Ireland, Saso (1990) found that in fact, many women operators seemed to have a more positive attitude towards work than many of their male colleagues. She attributes these gender inequalities to a combination of factors: the high turnover rate of young women due primarily to childbirth and the lack of creche facilities; the sexist assumptions of Japanese transplant managers (she might have included the British as well); and the extra long hours of work expected of supervisory staff.

Nevertheless, these gender inequalities are as much a product of capitalist social relations and the Japanese firms' specific accumulation strategies as of patriarchal relations. For instance, the electronic plant managements were keen to maintain the recent convention of exploiting an endless supply of young, malleable female labour from the depressed valleys rather than experiment with the employment of redundant miners, whose record of militancy and solidarity during the major coal disputes of the 1970s and 80s was second to none. And, of course, economic conditions in these areas ensures that labour remains particularly cheap. As one union official commented:

> The Japanese employers in this region will always set their pay rates in accordance with the general rate at that particular moment for that particular area and industry. The rate which is

> being paid will be the rate that the Japanese company has researched. And in truth, these companies, despite the low wages, are able to attract labour. I mean, the pay is pretty near the bone. It comes close to what we're arguing for a minimum wage. But employers are saying to us that if they increase the wage rate then we'll lose jobs. So in a sense, we're stuck in a square pegged hole. We're caged in by unemployment. We've got no opportunity for arguing and campaigning on pay. We can't say that there's a firm down the road that can pay more because there just isn't one. They're all paying low wages.

Therefore, the logics of capital accumulation and patriarchal relations together sustained the exploitation of large pools of low-wage female labour in those sectors and occupations that are designated as a woman's domain of employment. Consequently, most of the electronics firms in South Wales were quite content to continue replacing departing mothers with younger girls from their captive labour markets. Indeed, even Matsushita Electric's Cardiff plant preferred to bus many of its female workers in from the valleys rather than recruit from immediately outside the factory gates in the city's more temperamental labour markets. That is, with the exception of one group. The company did venture into Cardiff's ethnic minority communities to exploit these similarly segmented inner city labour markets. The plant was the only one in the survey to employ a number of black workers (68 operators, around 5% of the shop-floor workforce). Needless to say, not one of these occupied any supervisory or management positions.

Finally, few, if any, of these Japanese firms paid any attention to the employment rights of the disabled. When questions of continuous production, line discipline, bell to bell working and absenteeism are paramount, disability rights just do not come into the equation. And as with so much equal opportunity policy elsewhere, companies

were more concerned with image than substance. For example, the Gooding Sanken management at Abercynon were particularly keen to show off the plant's facilities for the disabled such as special toilets and ramp entrances to all buildings. Only one thing spoiled this set up. The plant employed not one disabled worker.

Performance Evaluation

Like the new recruitment procedures, the increasing use of performance appraisal systems in British industry is often connected to employers' quests for more sophisticated forms of developmental control over the 'flexible and autonomous' workforces of the 1990s (Long 1986; Townley 1991). Whilst this may ring true for certain industries and occupations, such a strategy might appear puzzling in relation to the minimal levels of skill, autonomy and discretion characteristic of the Japanese labour process in South Wales. In fact, the survey established that although personal appraisal schemes are quite common within Japanese firms in South Wales, these are used principally for assessing operator performance in terms of narrow, productionist criteria. They are rarely employed in any 'empowering' sense of developing skills in self-management, individual initiative and responsibility.

Of the 15 firms surveyed, 11 employed performance evaluation schemes. Of these, 8 firms applied their schemes to the whole workforce[2]. Although typical assessment

[2] Three firms restricted their evaluation schemes to certain sections of the workforce - in one case, management and supervision only; in another, all employees except management and supervision; and in the the third, probationers only. Of the four firms not employing evaluation schemes, one, Matsushita Electric, recently abandoned their twice yearly evaluations as part of a cost cutting exercise, whilst another, Calsonic, faced trade union opposition to their implementation.

criteria did encompass such behavioural characteristics as cooperative attitudes and initiative, individual contributions to output quantity and quality received precedence. This clearly reflects the Japanese obsession with maximising productive efficiency but it also highlights the extent to which the elimination of worker autonomy forms part and parcel of the same process. At Electronic Harnesses for example, where evaluation procedures formally afforded performance criteria three times the weight of social skills, one manager admitted that 'on the shop-floor, initiative is such a difficult quality to possess because, to tell you the truth, the factory tends to be so regimented'.

Linking evaluation results to the wage enhances the process of securing worker accountability for performance. Although the relationship between the two was not as significant as that achieved by the *satei* system in Japan (Endo 1994), two thirds of the firms operating evaluation schemes in South Wales used these to determine the payment of individual merit increments over and above operators' basic pay rises. Significantly, two of the larger firms, Sony and Hitachi, used their schemes in conjunction with performance related pay systems so that the employee's performance determined the entire annual wage increase. This represents a significant departure from traditional practice within British manufacturing firms where shop-floor wage systems are characterised by open, union negotiated rates for each grade. Effectively, Japanese production supervision succeeded in encroaching into shop-floor wage determining territory, which, in most indigenous manufacturing firms, is normally occupied solely by shop stewards and plant management.

When used in conjunction with the regulation of the reward structure, performance evaluation schemes constitute blatant mechanisms of management control. However, more subtle control methods may also come into play here. For example, much Foucault-inspired analysis views the supervisor-worker interaction and discourse, which is central to the evaluation process, as a clear managerial attempt to secure a more individualistic, obedient and self-disciplining workforce. Indeed, in contrast with the essentially unidirectional nature of the formal communications processes outlined below, many of the managers interviewed stressed the importance of their attempts to get employees to express themselves on questions of performance, 'to think hard about the positive and negative aspects of their performance with the company', and to reflect on how that performance might be improved.

However, the different Japanese managements were faced with a complication. For this control strategy to be effective the process demands a certain depth of discourse and two way discourse at that. It therefore requires an accommodating workforce. In fact, a good number of the managers spoke of their concern about worker reticence and apathy. Matsushita Electric recently abandoned its evaluation scheme for this reason. The different union interviewees felt that most members prefer to opt out of the pitfalls of one to one dialogue with supervisors by placing matters of individual performance and discipline strictly within the confines of formal disciplinary and grievance procedures. This passes the 'discourse problem' over to union representatives. One union officer admitted that with the Japanese:

> We're having to deal with individual disciplinary problems more than we've ever experienced elsewhere. Its a never ending saga in these firms. The stewards and the full time officials are

> continually dragged into it. They're mainly about absenteeism problems, or even workers missing off the line. Disappearing to have a quick fag is quite a common one because if the member gets caught we find that the Japanese managements always invoke the procedure. The Japanese are always trying to catch them out practising these old habits.

JOB SECURITY POLICIES

Despite their reported misgivings about certain aspects of Japanese work practices, many workers in Western industrial countries, subject to continual job insecurity themselves, might welcome the introduction of Japanese-style lifetime employment policies. However, as a number of analyses of Japanese employment traditions have demonstrated, the segmented hierarchy of the Japanese labour force, built upon a mass of sub-contractors and temporary workers at its base, has ensured that job security and welfare for the few are secured at the expense of low wages and insecurity for the many (Kumazawa and Yamada 1988; Littler 1982; Mitsui 1987). Studies of Japanese employment practices in the UK have found little evidence of any attempts to transfer these structural arrangements into this country. Nevertheless, many Japanese firms do attempt to display a measure of long term commitment to their workforces even though job security is rarely drafted explicitly into the labour contract (Oliver and Wilkinson 1992; Pang and Oliver 1988).

The Japanese transplants in South Wales followed this same trend. Although only one operated a formal no redundancy policy, three quarters of the firms claimed to support a general job security philosophy. This was something which many managers were

keen to contrast with the customary, stop/go, hire and fire habits experienced in many British firms. And whilst, as might be expected, these firms' employment policies articulated with British labour market realities rather than the traditions of their parent companies in Japan, their impact upon the quality of the lives of their employees did display some transnational similarities. That is, principally in terms of job insecurity for temporary staff and long working hours for core staff.

Table 3.2 summarises the employment policies of the eleven firms which reported the use of some form of job security measure. Apart from routine labour redeployment, the three principal measures adopted were recruiting temporary labour; contractual overtime; and annualised hours.

Table 3.2, Employment flexibility practices

COMPANY	EMPLOYMENT FLEXIBILITY MEASURES
Calsonic	Temporary workers (14% of directs); contractual overtime; labour redeployment.
AIWA	Temporary workers and extended probation (30% of directs); contractual overtime.
Matsushita Electric	Temporary workers (16% of directs); contractual overtime; annualised hours.
Sony	Temporary workers ('substantial numbers in the autumn period').
Gooding Sanken	Extended probation; contractual overtime; unpaid lay off periods.
Electronic Harnesses	Temporary workers (23% of directs); contractual overtime.
Yuasa Batteries	Contractual overtime; labour redeployment.
Matsushita E.C.	Temporary workers (8% of directs); contractual overtime.
Matsushita E.M..	Temporary workers (21% of directs); annualised hours scheme.
Sekisui	Labour redeployment.
Dynic	Temporary workers (20% of directs); reduced working week arrangements.

The employment of temporary labour featured strongly. As previously observed, the careful monitoring of production line temporary workers serves as an effective staff selection mechanism. In addition, of course, this type of employment contract allows companies to swiftly lay off or top up sections of the workforce, in accordance with product market fluctuations.

In some firms, this employment flexibility was achieved under the cloak of the ostensibly inoffensive probationary system, which, conventionally, is supposed to filter out incompetent recruits. At AIWA, for example, many of the plant's 300 temporary workers were classed as probationers. The least that can be said of the fixed term labour contract is that its length has a measure of certainty attached to it. In contrast, the tenure of employment for probationers can be cut or extended at the whim of management and the market. As one manager admitted:

> It can be increased to 6 months, 9 months, 12 months, sometimes 18 months. It will partially depend on the state of the market. Temporary status may lengthen if the market is uncertain but it may also lengthen if we're not quite satisfied with the quality of the individual that we've taken on...and eventually if we're just not satisfied then I'm afraid we get rid of them.

In Japan, manufacturing companies habitually extend working hours in order to enhance flexibility in production, effectively substituting human buffers for the material reductions introduced by just-in-time production (Endo 1991). In similar fashion, nearly half of the Japanese firms in South Wales reported the use of contractual overtime as an explicit component of their lean manning policies. At

Electronic Harnesses, for example, overtime working clearly facilitated management attempts to negotiate fluctuating product demand with a relatively small core workforce. The personnel manager:

> The size of the workforce is such that we work to the bone, there is never any surplus. The downside to this is that when the company gets busy then overtime has to come into operation and the company does have high overtime expectations. We insist that all operatives work a reasonable amount of overtime as part of their labour contract.

A key question here concerns the definition of a 'reasonable amount'. At many companies, a 'reasonable amount' corresponded to a considerable amount. At Yuasa Batteries for instance, overtime accounted for 15% of payroll costs. Similarly, at Calsonic, a demand that operators work at least 2 hours extra mid-week and 5 or 6 hours on a Saturday constituted a key recruitment selection criterion. And these were minimum amounts. The Calsonic management admitted that some operators in the plant's labour intensive manufacturing areas consistently work a 70 hour week.

This picture suggests that 'policy overtime' under lean production regimes has taken on a new dimension. Nichols (1986) observes that many analyses of the decline of British manufacturing industry have placed the blame fairly and squarely at the door of trade unions and 'restrictive practices' such as both union regulation of working hours and shop stewards' attempts to ensure an equitable distribution of paid overtime amongst their members. However, whilst the Japanese in South Wales are quite happy to exploit the tendency of British workers to clock up longer hours than their

counterparts elsewhere in the European Union[3], they have refused to countenance any measure of union regulation of this, whether in the form of shorter working week agreements or overtime distribution practices such as 'one in all in' and the use of rotas. Therefore, what is distinctive here is not so much the explicit use of overtime to secure consistently low manning levels against fluctuating product demand but the ease with which this is now achieved within a non-regulatory framework. Put another way, the relatively untrammelled extraction of absolute surplus value from overworked though 'secure' core workforces has become the salient feature of Japanese 'policy overtime'.

Ostensibly, flexible working arrangements in the form of annualised hours systems seem a more innocuous form of the management of working time. They are currently applied to around 9% of the UK workforce (Taylor 1994). Reshuffling the distribution of total working hours over a one year period provides employers with greater flexibility in matching workers' hours to market demands; in addition, it cuts labour costs by eliminating payments for overtime and reducing absenteeism. Accordingly, four of the Japanese firms exploited some form of flexible hours arrangement, and of these, two used standard annualised hours schemes. Whilst the flexibility which accrues to employers may also be sold to workers in terms of 'personal control over time management', those on the receiving end of these policies may not necessarily perceive them in such a positive fashion. When, in 1992,

[3] Although between 1983 and 1992 average hours worked each week in European Union countries declined by 4%, in the UK the fall was the lowest at 1%. Moreover, nearly half of the 7 million male workers in the EU countries who work a 48 hour week are employed in the UK (LRD, Fact Service, September 1994).

Matsushita Electric in Cardiff attempted to introduce annualised hours, its workforce embarked upon a campaign of resistance focusing on both the uncertainty in working hours involved and the principle of working unpaid overtime. Eventually, in the depths of a recession, the company secured compliance by intimidation: it threatened to sack any employee who failed to sign the new labour contract.

What these examples demonstrate is that 'job security' for those who labour under different Japanese regimes in South Wales comes at a hefty price. The downsizing of lean production depends on a core workforce which is subject to both long working hours and the continual stress of intensive work methods. And it may also depend on the employment of temporary workers who enjoy no job security or employment rights but who still suffer the same intensified exploitation at the point of production.

EMPLOYEE COMMUNICATIONS AND SINGLE STATUS

Different management techniques aimed at consolidating the new balance of power at the workplace have accompanied the recent decline of trade union influence in the UK. New methods of direct communications, which seek to bypass trade unions as the principal channel of information to workers, represent one example of these. Another is the development of single status and harmonisation measures designed to obscure fundamental class divisions and interests. Both techniques are commonly associated with Japanese management practice.

Small group-based communications, in the form of team briefings, constitute one of the more common mechanisms of direct communications between managers and workers. A number of recent surveys clearly indicate that team briefings are now routine practice in British manufacturing industry (IDS 1992a; Marchington et al. 1992; and Millward 1994). Moreover, one author, on the basis of the latest Workplace Industrial Relations Survey findings, has gone on to boldly assert that whilst worker involvement via trade unions has declined, the new team briefings can be viewed as 'the channel that increased in extent to the greatest degree (and) was the one with the greatest potential for employees to play an active part (in their companies)' (Millward, 1994, p.86).

Surveys of Japanese firms in the UK have demonstrated that communications structures such as team briefings are both common and well established. The Japanese firms operating in South Wales proved to be no exception here with all but one reporting the use of team briefings, the majority on a daily basis. A much smaller proportion of these firms also organised factory conventions for the whole workforce.

According to management theory, the function of a team briefing is to promote employee involvement and team building by encouraging two way communications as well as to impart management-approved information to subordinates (IDS 1992a). However, the picture to emerge from the survey is that rather than exhibit potential for Millward's (1994) notion of worker involvement, Japanese team briefings bear a clear democratic deficit. Direct communications tended to be strictly top down processes, focusing purely on narrow productionist issues rather than wider factory politics.

Firm after firm in the survey stressed that the real purpose of the Japanese team briefing system is merely to provide succinct briefs to production teams in order to explain the day's production targets; to establish labour deployment to meet those targets; and to address production and quality defects and any individual operator performance problems. The following summary from an AIWA manager was typical:

> Our line briefings are held at the start of each shift, they're led by the line supervisors and last about 5 minutes. They will discuss the day's targets and of course questions of quality and defects will also be dealt with, including who on the line has been responsible for any quality problems. And if people need a telling off it's at these meetings that they'll get it.

A number of managers expressed concern at the lack of employee feedback during these sessions, although this reticence was hardly surprising considering the limitations of the briefing agendas. A GMB union official reflected on this:

> Yes, I've seen these team briefings in operation. But I've never felt that they've been of real value. The Japanese managers might think they are, but really, as they themselves will admit, they're only used to help the workforce make sure that their 50 units of production go out the door each day. Team briefings are used as a pep talk to make sure that production targets are met. I certainly don't see them harming us. If that were true, then surely it should indicate that the whole aspect of company policy and company news rather than these narrow production specifics were on the team briefing agendas. But they're not. So I'm not worried about it cutting across the information coming from the GMB because team briefings were never designed to do that.

As we shall see in Chapter Eight, this view of the impact of team briefings on trade union communications maybe somewhat overconfident but it does highlight the real link between Japanese 'employee involvement' and the needs of production. Stressed lean production systems have no requirement for experiments in worker self-management and participation. They demand highly disciplined workers with minds

focused solely on the day's production targets. Thus, as Morris et al. have argued, Japanese direct communication methods provide a further means of maintaining firm discipline on the line, constituting another sense in which 'Japanese transplant management might be considered 'strict' or 'autocratic'' (1994, p.92).

Many Japanese firms incorporate single status conditions into their employment contracts with the purpose of diminishing 'them and us' attitudes and class antagonisms. This is not done for its own sake. Worker acceptance of single status and the associated notion of membership of 'one big, happy and equal family' offers employers clear advantages in terms of management surveillance of the shop-floor and reducing resistance to work intensification. For these reasons, nearly all of the firms in South Wales supported some form of harmonisation, although, as Table 3.3 suggests, for many firms the principle had less impact upon those more fundamental conditions of work which attract major personnel costs or which impact upon management control.

Table 3.3, Single status conditions

SINGLE STATUS CONDITION	PERCENTAGE OF FIRMS WHERE CONDITION OBTAINS
Harmonised pay system	33
Hours	66
Equal sick pay	26
Equal pension scheme*	62
Clocking	80
Single grading scheme	26
Single status canteen	80
Single status carpark	66
Company uniform	86

* 2 firms reported no pension scheme provision for any employees.

The more cosmetic manifestations of equality, such as single canteens or the wearing of uniforms, were indeed common; but unequal sick pay provision and other more traditional distinctions between shop-floor workers and staff/management remained intact. When these impacted directly on those concerns which are central to the management of lean production, such as absenteeism, then the distinctions could be extreme. For example, many of the companies paid full sick pay to their management and salaried staff whilst their hourly paid suffered the hardship of SSP. And ironically, this was excused by resort to the very status-based arguments that the Japanese are supposed to be abandoning. As one manager said:

> You have to remember that managers have a higher standard of living , they couldn't survive, they couldn't pay their mortgages if they had to rely solely on the SSP scheme. Okay, we apply it to everyone else but SSP is just totally inappropriate for managers.

Equality of status between managers, staff and workers, therefore, had little real material basis in these firms. However, this did not inhibit their mobilisation of egalitarian corporate ideologies. Many managers were keen to stress the importance which their Japanese employers placed on the idea of regarding the company as 'one team', comprising managers and employees willingly working together with unity of purpose. A director at Gooding Sanken provided a typical example of this:

> Our Japanese managers talk constantly of teams and team philosophy and all in terms of the family, regarding Gooding Sanken as a family. There is a continual stress on the idea that GSK employees should be pulling together as one team. Our idea of teamworking is that everybody in the firm is a member of the same family and that there should be no distinctions between individuals within this family.

The Japanese managing director of this company produced a list of the key management philosophies and slogans to be instilled into the British managers at his Welsh transplant. These were printed in all management handbooks. He spelt out his 'corporate team philosophy' in the following idiosyncratic way:

> OBJECTIVE 8
>
> Two Families
> Working place is another family.
> Create sharing happiness and bitterness in family (workplace).
> Have an attraction to be able to motivate and improve moral of family (work).

This was a company where members of the same 'family' could be disciplined for talking to each other on the line and where most production operators earned just £140 per week. 'Happiness' and 'sharing' were therefore in short supply. The same ideologies could also be enlisted to support the needs of production at particular times of the year. At AIWA for example, habitual last minute management requests for overtime during busy production periods often caused anger and resentment amongst the predominantly female workforce. Apart from problems of fatigue, many women with children encountered difficulties in arranging childcare at short notice. In order to reduce this opposition, the AIWA senior management frequently instructed managers and staff to themselves man the line and 'dirty their hands' in a symbolic gesture of 'solidarity' with the women. Similarly, other staff workers were forced to work on in their offices, unpaid, until the production line targets were achieved.

In different ways, therefore, single status and direct communications often served on the one hand to obscure real class inequalities and power imbalances at the workplace, whilst on the other, to maintain management's leverage over worker effort.

INDUSTRIAL RELATIONS

The 'new realism' in the field of contemporary industrial relations, characterised by the emergence of harmonious working relationships between compliant trade unions and company managements (Bassett 1987), is often regarded as an essential support for the highly stressed, low waste JIT/TQM production systems. This is because a more adversarial form of industrial relations will inevitably cause periodic and severe disruption to factory output (Milsome 1993; Morris et al. 1994; Oliver and Wilkinson 1992). This section considers the extent to which the Japanese transplants have succeeded in maintaining the sanctity of continuous production on their assembly lines by fashioning a new consensual relationship with their recognised trade unions. Or, what Millward (1994) has defined as the construction of the Japanese pattern of a 'new industrial relations'.

Table 3.4 summarises the union recognition agreements and bargaining structures within the 15 Japanese firms.

Table 3.4, Recognised trade unions and negotiating arrangements

COMPANY	SINGLE OR MULTI UNION AGREEMENT	UNIONS	MEMBER-SHIP TYPE	COMPANY COUNCIL	UNION NEGOTIATING COMMITTEE
Calsonic	Multi-union, single table bargaining	TGWU, AEEU, MSF, TGWU-ACTSS	Manual and non-manual	No	Yes
AIWA	Single	GMB	Manual	No	Yes
Matsushita Electric	Single	GMB/APEX	Manual and non-manual	Yes	Yes
Sony	Single	AEEU	Manual	No	Yes
Hitachi	Single	AEEU	Manual	Yes	Yes
Gooding Sanken	Single	TGWU	Manual	No	Yes
Electronic Harnesses	Single	AEEU	Manual	Yes	No
Yuasa Batteries	Single	AEEU	Manual	Yes	No
Matsushita E. C.	Single	AEEU	Manual	Yes	No
Matsushita E. M..	Single	AEEU	Manual	Yes	No
Sekisui	Single	AEEU	Manual	No	Yes
Dynic	None	None	None	None	None
Diaplastics	Single	GMB	Manual	Yes	Yes
Takiron	Single	TGWU	Manual	No	Yes
Star Micronics	Single	GMB	Manual	No	Yes

In a region notable for its union traditions, where, 'belonging to a union is as natural as breathing' (Morgan and Sayer 1988, p.180), and given the tendency of some UK-based Japanese inward investors to tolerate some form of union organization, it is not surprising that 14 out of the 15 firms surveyed recognised trade unions[4]. Moreover, in line with other surveys of Japanese HRM policies, nearly all of these firms operated single union agreements. The brownfield Calsonic plant provided the one exception, though even here the management persuaded the four site unions to merge into a single bargaining unit.

[4] It should be noted that this propensity to recognise trade unions extended primarily to manual workers. Only 2 of the 15 firms included white collar workers in their union agreements and one of these was a multi-union brownfield plant.

The practice of recognising single unions has a long history in the UK (Millward 1994), but until the 1970s and 80s it was less common in manufacturing industry. And, in the context of declining membership, it was the introduction of single unionism into these Japanese manufacturing plants that caused the greatest political fallout within the Welsh trade union movement (Morris et al. 1994; Munday 1990). When Japanese multinationals set up operations in foreign countries they do not court controversy. They prefer the low key approach, seeking an unobtrusive integration into the local community. But in South Wales, the Japanese were prepared to become uncharacteristically enmeshed in this particular conflict. Why was this?

Although single union deals facilitate the introduction of full labour flexibility into labour contracts, this was not the only factor to shape the different transplants' industrial relations policies. Of equal importance was their determination to fashion a hybrid company unionism with an underlying objective of building company loyalty and worker commitment at the expense of wider worker solidarity. According to the General Secretary of the Welsh TUC[5] (one of the leading figures involved in attracting the early Japanese investors to Wales):

> They just couldn't understand the British practice of multi-plant unionism. They just could not accept the idea of recognising trade unions which also had members working in companies that were in competition with them. They saw this as a question of conflicting loyalties. They stressed that their employees, if trade union members, had to display just one form of loyalty, a loyalty to their own employer.

[5] Interview field notes, 28.9.94.

> So what developed was a compromise between the UK multi-union tradition and Japanese 'yellow unions'. This was that as long as the Japanese did not join the different employer federations in the UK, then the recognised union would not involve itself with disputes outside of the company. What emerged was a sort of red circling of industrial relations in the Japanese firms which met their real concerns about the problems of extraneous factors and actions common in British industrial relations.

The old EETPU - now the electrical section of the AEEU - is the union most commonly associated with Japanese single union agreements in the UK. However, prior to the mid 1980s, these membership agreements were distributed fairly evenly between the major engineering unions in South Wales. It was only after this period that hostilities between the TUC unions in Wales erupted, ostensibly over the controversial issue of no strike deals, though propelled by an obsession with signing up new recruits within the context of a membership haemorrhage in the Welsh coal and steel industries (Morris et al., 1994). And it was then that the EETPU started to monopolise the signing of recognition agreements with the Japanese. The General Secretary of the Welsh TUC again:

> In 1984, the EETPU in Wales came out with a new, revolutionary view of themselves which was about removing the image of the EETPU electrician. Instead, they saw themselves as general workers. One newspaper described the new EETPU member as anybody who worked under a light bulb. It was quite accurate and it became a major issue because they began poaching members. What's more, between 1984 and 1986, which was the big period of Japanese investment in Wales, the EETPU virtually got a full house. They had their own intelligence units, they had a full time office in Japan, they developed sophisticated presentational packages, they invested in new training facilities to upskill their members, and they had their no strike sales pitch. Other unions hated it. They weren't getting their own goodies any more, and they regarded the EETPU approach as short selling trade unionism and as pushing the unions into the gutter. For most of them no strikes meant no rights.

In fact, although many firms in the survey did have their own no strike agreements, the management interviewees placed more emphasis upon the general decline in overt labour militancy in South Wales. The actual agreements are not legally enforceable. Consequently, they were regarded in a more limited sense as symbolising company harmony and cooperation rather than enforcing it. Indeed, the union officers interviewed stressed that the dispute record within the Japanese plants in South Wales was no different to the suppression of strike activity elsewhere in British-owned firms in the region. Sporadic walkouts have occurred at Hitachi, Sekisui and Matsushita Electric; during the national engineering dispute over the shorter working week, the Sony workforce walked out on strike only to be rapidly recalled by embarrassed AEEU union officers who regarded their action as a 'mistake and a misinterpretation of national directives'; and more recently in 1994, the Matsushita Electric workforce maintained a solid 2 month overtime ban during a pay dispute.

Moreover, as with any unionised workplace, the propensity of the workers in these Japanese plants to enforce their collective workplace rights, including the right to take industrial action, was also a function of both national union policy and plant-level union leadership. At the relatively trouble-free Sony plant for example, one union officer claimed that the performance of the 'new realist' AEEU local stewards was such that 'the company regarded the AEEU as their own union, they put their arms around them, totally embrace them, and they couldn't be happier with their industrial relations record'. And it is no coincidence that the majority of the 7 transplants which placed their negotiating machinery within the confines of company councils, or advisory boards, based on the consensus model pioneered at Toshiba in Plymouth

(Trevor 1988), were those which recognised the AEEU. In these firms, management control over council membership, management control over bargaining agendas, and procedures which ensure that any disagreements can be 'talked out' until management objectives are secured, all acted to assure the attainment of a decidedly one sided form of 'consensus'. Consequently, as Broad's (1994) case study of one Japanese transplant's Company Council demonstrates, the more independent-minded shop stewards and workers rapidly become disillusioned at the realisation that those questions which are central to shop-floor interests are defined as management prerogatives.

That is not to say that those firms which negotiated with the more traditional union controlled negotiating committees did not seek incorporation and acquiescence. Indeed, in some of these firms, the same management objectives were secured by use of more explicit forms of coercion. For instance, as the GMB convenor at Matsushita Electric stated:

> One of the methods the Japanese use in their industrial relations here is when there is a 'final, final offer', and the Japanese put a lot of stress on the 'final, final', then the offer must be recommended by the JSSC [Joint Shop Stewards Committee] even though you may have your own personal misgivings. If the package is not recommended then they withdraw the whole package. You all lose your pay rise. It's industrial blackmail frankly. The number of times I've had to tell the stewards not to be obstreperous. You're forced into a position where you have to accept, even if it runs against your principles.

Sometimes, however, distinctive national union policies and local steward activism supportive of independent trade unionism can make a difference here. As Lucio and Weston (1992) argue, trade unions are manifold and complex organizations and they

react to different managerial strategies in a variety of ways. Just because the AEEU choose the concessionary approach to Japanese management does not mean to say that all other unions must follow suit. Thus, 'there can be no uniformity of inevitable outcome of human resource management' (p.216). For example, union membership densities within the surveyed firms varied from 35% to 95%, and although the higher densities tended to obtain in the longer established plants, independent union activity also impacted on this. A GMB Regional Officer argued that:

> The GMB densities tend to be higher than the AEEU because we've always been more aggressive, we've always worked harder on the basic union issues...and I have to admit that the Japanese don't exactly welcome us with open arms. In fact they keep us at arm's length most of the time, even at Panasonics [Matsushita Electric] where we're one of the oldest established unions in any Japanese plant over here. Over the years we've had to take an aggressive approach. We've had to continually try to prove to the management that the members actually want us. And this was much easier in the 1970s when the Panasonics and the AIWAs first came because we were operating under different political conditions then. But these days it's a lot more difficult. We really have to be on our toes.

Thus, in some of these Japanese transplants, labour organization is maintained by conscientious and committed union activists just as it is in many British-owned factories. The GMB tended to bombard its members with leaflets and newsletters to keep the union message alive. Union campaigns on such bread and butter issues as wages, employment conditions and health and safety were all regular events. Sometimes these were reinforced by strike ballots, even though they were rarely won. A good number of the management interviewees reported likewise that although strikes were a rarity, negotiations with their unions were conducted in a traditional, combative atmosphere within an industrial relations that was certainly not as

harmonious as the literature often suggests. As a Sekisui manager admitted, life on the shop-floor is subject to continual local arguments and conflicts between supervision and 'traditional union men, traditional union thinkers'.

The case of one such 'traditional union thinker', an ex-British Steel shop steward now employed at the Matsushita Electric plant in Cardiff, is instructive here. It exemplifies how personal courage, perseverance and deeply-held convictions can breed wider collective support and resistance to Japanese managerial prerogatives:

> When I first came here about 10 years ago I thought I'd walked right into a concentration camp. The workers were treated terribly, they had no rights at all. They were just being walked over by the bully boys. But we've come a long way since then. I don't want to blow my own trumpet but we've changed things quite a bit here now. The members stand up to the management and we've won new rights, we've got a sick pay scheme now, bereavement leave, and these things are important.

Needless to say, the application of traditional union principles coupled with strong leadership incurred a number of personal costs:

> Soon after I started work here I was always bumping into some of the men from the Llanwern steelworks who'd also managed to get a job here, and they used to continually get on at me, urging me to stand, because to tell you the truth the union at this plant was next to useless in those days. At this time I was a clerk in the personnel office of all places. It was my wife [a shopfloor supervisor], who got me a job here as a sort of odd job man. But because I had a few 'O' levels I got offered this clerical position. Anyway, after a lot of thought I decided to stand for the union, and I got elected.
>
> Two days later I got called up by senior management and one of the directors said to me, "we know you, we know who you are, you're a Llanwern man, a union agitator. We've got our eyes on you. One false move and you're out, so's your wife". It was real blackmail. I got chucked out of the department and they put me on cleaning duties, picking up litter from the

> boundary fences, that sort of thing. I'm back in the factory now but I've been moved from shit job to shit job ever since. But I'm careful mind. I won't let them get me. I always keep to procedure, never break the rules. It's the only way to stay safe in this place.

Industrial relations in these Japanese firms, therefore, are more complex and differentiated than the functionalist HRM paradigm suggests. Many of the plants are unionised because such is the tradition in South Wales. And although the Welsh TUC and a number of right wing union officials have acted to compromise the tradition of a free, independent trade unionism, the harsh reality of life on the shop-floor under these highly disciplined, intensive production regimes provides a countervailing force here. As one union officer said, 'they really are stressed systems. And the work is exactly the same day in, day out. It must get boring and frustrating. So people do get comfortable with the idea that they have a union to call on, something to fall back upon'.

In reaction to attendant problems of labour discipline and control, some of the more recent Japanese arrivals have expended time and money on the construction of more harmonious industrial relations systems based on management-driven advisory boards. These aim to suppress the independent, collective articulation of rank and file interests. In contrast, a number of the older - and larger - plants in this depressed region are content to exploit, in a traditional manner, labour's structural dependence on the employer for its livelihood. That is, by gaining broad acceptance of the capitalist notion of managerial prerogative whilst seeking to manage local conflicts over questions of reward distribution, labour discipline, and so on. And as we will demonstrate in Chapter Seven, just as with British employers, the success of these

different strategies is itself dependent upon coherent management, the relative strength of plant labour organization and wider political and economic conditions which impact upon the balance of power between capital and labour.

To conclude, some aspects of Japanese HRM policy in South Wales represent a marked departure from the more laissez faire, hire and fire approach to managing workers characteristic of traditional practice in many older British firms in the region. In these factories, personnel matters are rarely central concerns of corporate management. By contrast, although the transplants' specific practices might differ in detail, such as in recruitment and selection, their strategic objectives are always the same. That is, the Japanese managements were quite consistent in their careful attempts to recruit and regulate teams of workers with the attributes necessary to sustain the highly intensive and disciplined nature of their production regimes. This latter point highlights how remote from hard reality are some of the more 'progressive' business school evaluations of Japanese human resource management. Few policies were detected that can be characterised as 'soft' in the sense of offering real opportunities for employee involvement and significant two way dialogue with management. The more distinctive HRM practices, such as performance evaluation and direct communications, were notable for the ways in which they ruthlessly attempted to secure individual and team accountability for productive performance rather than open up any potential for meaningful worker participation.

Moreover, some features of Japanese HRM policy replicate, indeed take advantage of existing structural conditions in the South Wales labour markets. Thus, the abundant pools of cheap, malleable, low skilled labour, unsocialised in the ways and traditions of labour organization, and segmented in terms of gender and to a much lesser extent race, served these companies well. And in the 'hot house conditions' of high unemployment and intensified market competition (Morgan and Sayer 1988), to which might be added the debilitating constraints imposed by the Government's anti-trade union legislation, organised labour resistance to management control can be critically restricted, though as the survey demonstrated, not completely suppressed.

In many respects, therefore, a 'fit' between Japanese work organization and human resource management did obtain. This was not one of fashioning new, enterprising work attitudes in a context of 'enriched' and 'empowering' labour processes. Instead, the imposition of managerial prerogatives, the suppression of rank and file worker controls, the extant fragmentation of production line tasks and the consequent intensification of labour under lean production demanded a more prosaic, though still strategic, personnel policy. That is, in the distinctive contemporary political and economic climate, such measures as careful recruitment techniques, the disciplining exploitation of temporary workers, the diligent control of company communications and the different attempts to restrict independent trade union activity all contributed to worker 'cooperation' and compliance on the shop-floor.

This thesis will now consider, in more depth, the development of the same processes of change and their impact upon workers in a long-established British brownfield plant.

PART TWO

INTRODUCTION

The foregoing survey of Japanese management practice in South Wales established three pivotal facts for this thesis. Firstly, that it is wholly inaccurate to ascribe to the Japanese transplants the general adoption of some 'post-industrial', new management paradigm built upon the ideal types of just in time production, mass employee involvement through TQM, and the complementary 'soft' management of human resources.

Secondly, that this so because for many firms involved in mass production, quixotic management innovations are just not appropriate in an environment of intense global competition and cost cutting. In any case, the particular characteristics of different product markets, labour markets and process technologies - and different sectoral market pressures and traditions - will inevitably militate against convergence towards any single management paradigm. For example, global competitive pressures for labour saving efficiencies in modular assembly production have provided the spur for the introduction of teamworking in many UK auto plants. But the same pressures have not prompted similar work organizational changes in the consumer electronics industry where the high volume manufacture of a relatively narrow range of interrelated equipment designs continues to require simple, labour intensive assembly operations organised along traditional production lines.

Thirdly, whilst generalised notions of a post-Taylorist 'Japanization of British industry' are in fact groundless, this does not mean that there is nothing sufficiently distinctive about Japanese management practices in the UK to warrant investigation of their diffusion into indigenous firms. For, as the last two chapters have made clear, despite their work organizational differences, Japanese firms in South Wales do share certain similarities in their careful approach to the control and 'management by detail' of capital and labour power resources. In all cases, this is aimed at securing greater leverage over worker effort and worker compliance to boot. Therefore, although the belief that changes within Japanese firms may herald a rupture with previous manufacturing practice is in fact fallacious, this does not mean to say that the spread of Japanese management techniques represents nothing new at all.

Two key questions arise from this. Firstly, if the sum total of Japanese transplant operations in the UK is to assume a significance greater than that of constituting merely a novel branch of MNC transplant activity employing only around 60,000 workers nation-wide, then we need to demonstrate clear connections between the distinguishing features of these Japanese firms and changes in management practices in similar British firms. Secondly, even if such a relation can be outlined, we need to explore this diffusion further by explicating developments at the point of production. That means seeking the views of managers, and above all, affected workers, whose opinions must take centre stage in any critique of contemporary changes in capitalist production methods. This requires switching methodologies by moving from the survey to the in-depth case study approach.

The following five chapters effect this by providing an analysis of both quantitative and qualitative research data accumulated over nearly two years at a car pressings plant located in Llanelli, South Wales. A full summary of the methodology employed is provided in Appendix A.

The author makes no apology here for this focus on just one company. Apart from the general point that such an in-depth approach often provides unrivalled opportunities for exhaustive study of the processes of change, this particular factory offered two additional benefits which could not easily be disregarded. Firstly, the plant management was prepared to provide unhindered access to its shopfloor and white collar workforce in terms of workplace observations, formal and informal interviews and questionnaire distribution. Secondly, and this was crucial for the research, these facilities were offered at the very same time that the factory was embarking on a major exercise of transforming its working practices, a process which the plant management explicitly attributed to Japanese competition and influence.

Therefore, at one level, what follows is an investigation of the similarities between local Japanese management practice and the specific innovations introduced at a large British manufacturing plant in South Wales. At another level, the accumulation of data during a period of significant change for shop-floor workers provides evidence of the ways in which capitalist social relations of production ensure that 'Japanization at work', even in its more mundane form, is not unproblematic. That is, we explore the contradictions, conflicts and class struggles which remain inherent to the contemporary capitalist labour process.

CHAPTER FOUR

LOCAL AND GLOBAL CONTEXTS TO JAPANIZATION AT A BRITISH FACTORY

The case study firm, CarPress, occupies a 30 acre site on the outskirts of the old port town of Llanelli on the Swansea Bay. Llanelli is a traditional working class town with a proud industrial history built upon coal and steel. Although it has undergone a metamorphosis since the end of the last War, involving the complete demise of the latter industries, the town remains an important centre for employment in an area that contains the largest concentration of manufacturing industry in Wales (Moreton 1990).

The substantial diversification of the local industrial base should not obscure the fact that Llanelli and the surrounding area remain dependent on an economic demand for hard metal in one form or another. Despite a series of rationalisations, the giant British Steel works at Port Talbot still dwarfs other local enterprises. And a plethora of autocomponent, general engineering and steel fabrication companies means that, if they are lucky, the workers in these male-dominated industries will spend most of their working lives using different skills and technologies in the process of shaping and fabricating steels and other metals into a variety of forms for further capitalist production.

Llanelli, therefore, remains a working class town. Fifty five per cent of the heads of its households fall into the Registrar General's manual class categories; despite the exhortations and inducements of various Conservative Governments, over 20% of its families live in council houses; and over 35% of its households possess no car[1]. Moreover, regardless of recent attempts by the leadership of the Labour Party to free itself from notions of class representation, the town's electors insist on voting as a working class. In Llanelli, as in most other South Wales towns, votes for the Labour Party are weighed rather than counted. The current Member of Parliament secured a majority of 21,000 votes over his Conservative rival at the 1992 General Election.

Unemployment continues to overshadow and oppress many of the old industrial towns and villages of South Wales and Llanelli is no exception here. As a number of the comments from workers in the case study will testify, the fear of losing one's job is a threat that remains at the back of everyone's mind, it is something that undermines both the stability and aspirations of every household in the town.

The official unemployment rate fluctuated between 10 and 20% throughout most of the 1980s and early 1990s; and in 1991, 43% of Llanelli's 16-64 year olds were either unemployed or economically inactive[2]. However, bad as they are, the figures disguise a more serious position for the younger inhabitants of the town. A cursory glance through most editions of the local newspapers in recent years will find a relative

[1] Office of Population Censuses and Surveys (1994), 1991 Census, County Report, Dyfed, Parts 1 & 2.
[2] Welsh Economic Trends, 1982-1994; Anthony Moreton, Survey of Wales, Financial Times, 16 September 1992.

decline in the number of headlines proclaiming the deeds of the legendary 'Scarlets' (the Llanelli Rugby Club) compared to the regular angst-ridden reports of the use of 'Browns' (the youth culture's euphemism for heroin) and other such drugs. Youth unemployment is a major contributory factor to this type of social problem.

At the time of the last Government Census in 1991, 36% of Llanelli's 16 to 20 year olds were either unemployed or registered on Government schemes. This figure rose to 40% of the town's young males. The figures improve only marginally once these young adults move beyond the 'training age'; 33% of the town's 16 to 24 year old males remained unemployed or on Government schemes[3]. These figures reflect the fact that, recent inward investment notwithstanding, much of the restructuring of job opportunities in Wales has not been helpful to the cause of youth employment. The local diversification in the Llanelli area failed to generate sufficient new manufacturing jobs to off-set the decline in coal and steel; only the service sector enjoyed a significant expansion (Harris 1987). Moreover, although manufacturing industry in Wales fared better than elsewhere in the UK during the two major recessions at the beginning and end of the 1980s, this relative resilience failed to translate into the creation of new manufacturing jobs for the youngsters coming on to the labour market. The more fortunate of Llanelli's young job seekers, many of them women, have managed to secure low paid, often casual employment in the area's expanding service and tourism industries. But many others are either unemployed, or are forced into worthless Government training schemes.

[3] Office of Population Censuses and Surveys (1994), 1991 Census, County Report, Dyfed, Parts 1 & 2.

The problems of unemployment in general, and youth unemployment in particular, are important here. This is because, as we shall see, they contribute to an environment of fear which the management at CarPress was able to adroitly exploit in its efforts to introduce a number of new floor working practices which undermined the collective interests of its shop-floor workforce.

THE CASE STUDY

CarPress Ltd is a body-in-white presswork and fabrications company. It operates autonomously within the CarPress Engineering Group of autocomponent manufacturers. CarPress Engineering is now itself owned by the German multinational conglomerate Fried. Krupp AG/Hoesch-Krupp and forms part of the group's automotive division which specialises in the manufacture of complete body parts, crankshafts and car suspension components. Despite this foreign ownership - which is a recent development - the case study remains 'British' in almost every other respect. That is, in terms of management style, industrial relations traditions, union organization, and so on.

CarPress's Llanelli factory started life in 1961 as part of BMC's Fisher and Ludlow Division. It was set up as a satellite plant with the purpose of feeding pressed parts and assemblies to the main BMC factories at Longbridge and Cowley. During this period, large amounts of new manufacturing capital were invested well away from the well organised, high-cost labour areas in the Midlands and the South. As with most

investments on greenfield sites today, many employers were seeking to take advantage of the vulnerability of labour in regions such as the North West and South Wales where the decline of traditional industries and consequent unemployment placed labour in a difficult bargaining position (Beynon 1984).

In those days, in contrast to the carefully planned and phased production at recent Nissan and Toyota investments in the UK, green field site organization could be chaotic. One manager and ex-apprentice reminisced:

> I remember all of the schools in Llanelli were invited to send kids in for mass interviews for apprenticeships. You won't see that sort of thing these days! Luckily, I was accepted for one of these. It was a classic greenfield site. There was little local experience of the auto industry apart from the Morris radiator factory next door. And people were interviewed by the hundreds because the area was undergoing quite rapid industrial change with a lot of the older industries dying out, coal and tinplate especially. When I started in May 1961, there was hardly anything in the factory running at all. The administration was housed off site in an old guest house, the press shop was built but it was empty of presses and I had to spend my first year in a rented bakery which was used as a training shop.

By the end of 1962, initial production had commenced in the two main manufacturing areas - the press and assembly shops. Press lines and multi-weld sections began the fabrication of complete door sets for Alex Issigonis's new BMC Mini. Over the next two years, line capacity was increased for the production of Mini sub-frames, Austin/Morris 1100 door sets, Austin Maxi and Austin/Morris 1800 floors and a variety of other pressed assemblies such as engine compartment valances and wheel arches.

In 1965, BMC merged with another body pressings company, Pressed Steel, to form British Motor Holdings. Three years later BMH merged with the Leyland Group to create British Leyland. By this time the Llanelli factory employed nearly 2000 workers, a figure that was maintained throughout most of the 1970s.

However, bad times were around the corner. During the 1980s, a combination of recession, increased market competition and maladroit corporate management caused a disastrous drop in the newly named Austin Rover's domestic and foreign market share. As a result, a process of wholesale sacking took hold throughout the decade (Williams et al. 1994a). The Llanelli workforce took its fair share of the redundancies and between 1981 and 1988 suffered a reduction from 1723 to 928.

Even in these circumstances, nothing could prepare the workforce for the helter-skelter of events that started in July 1988 when the Government completed its sale of Rover to British Aerospace. Despite Rover's earlier public reassurances to the contrary, British Aerospace announced the closures of Llanelli and the Cowley South Works just four days after the privatisation (Lovering and Hayter 1994). Subsequent union and community campaigns made little impression on the new BAe management. Then, in January 1989, just two months before the closure of Llanelli was due to come into effect, a new player arrived on the scene. A Stevenage-based autocomponents supplier, CarPress Engineering, announced that it was holding talks with BAe-Rover with a view to taking over the factory. Coincidentally , this company also started life in the early 1960s and through a process of acquisition rapidly expanded its operations to 10 factories located in the South and South East of

England. This expansion was partially driven by an explicit anti-union policy. As one CarPress Director admitted, 'the principle concern here was the need to respond to the union militancy which damaged the industry in the 1960s. It was essentially a multi-plant strategy for strike breaking'.

After two months of inter-firm negotiations, which were complicated by a series of strikes and walkouts over questions of employment conditions and union recognition rights, the sale was completed. The local media jubilantly reported that the factory's remaining 750 jobs were safe. But within 12 months these were again under threat.

In May 1990, the CarPress Engineering Group succumbed to a hostile take-over bid by a firm of property speculators named Markheath Securities, the British arm of Australia's third largest conglomerate, the Adelaide Steamship Company. A number of CarPress Directors resigned, convinced that Markheath Securities was poised to carry out an asset stripping operation (Pearson 1990). In the event, financial scandals within the Alan Bond empire in Australia caused the Adelaide Steamship Company to incur multi-billion pound debts which, in turn, forced Markheath to sell CarPress more or less intact to the German steel and engineering company Hoesch. And this bewildering series of rapid succession, post-privatisation auctions of workers' livelihoods was still not complete. In December 1991, the German multinational Fried. Krupp announced the take-over of Hoesch in its battle for the control and rationalisation of the mighty German steel industry (Parkes 1991).

Up to this point, rarely was the Llanelli factory anything more than an operation of at most marginal interest to the main actors involved. However, once the plant was integrated into Krupp's automotive division, contemporary global changes in the autocomponents industry started to move in its favour. In contrast to the convictions of proponents of flexible specialisation, suppliers to the auto industry are not experiencing vertical disintegration and consequent local networking. The major car assemblers are shifting towards single sourcing of supplies to control component price and quality. At the same time, the benefits of economies of scale, along with the assemblers' encouragement of suppliers to develop a presence in each of their global markets, has combined to bring into effect industrial concentration and the emergence of an international oligopoly of component suppliers (Amin and Smith 1991). Fried. Krupp is one of these oligopolies.

As a result, the factory remained a major supplier to the Rover car assembly operation. But it also succeeded in building up a European and Japanese customer base on a long term, single supplier basis. In 1992, as much as 90% of the factory's output was destined for Rover. Management aimed to reduce this to 40% over 5 years. By 1995, the Llanelli plant had become a principal first tier supplier to Toyota in Derby and GM Opel in Germany. It also secured important long term contracts for body-in-white parts with Honda in Swindon and Mercedes Benz.

WORK ORGANIZATION AND THE LABOUR PROCESS

During the period of the research, CarPress employed 718 men and 45 women[4], 763 managers and workers in all. A workforce profile is provided in Table 4.1. Since the factory was principally a manufacturing unit, over 600 of these were hourly paid employees: semi-skilled operators and skilled production support workers. The white collar workforce approached nearly 150 in number, comprising managers and staff employed in the finance, sales and marketing, quality assurance, engineering, manufacturing and human resource functions.

Table 4.1, CarPress Workforce Profile

FUNCTION	NUMBER EMPLOYED (N)	FUNCTION	NUMBER EMPLOYED (N)
MANAGEMENT		**MANUFACTURING**	
Directors	7	Senior Managers	1
Staff	1	Managers	4
WAGES & FINANCE		Production Superintendents	4
Senior Managers	2	Production Supervisors	28
Administrative & clerical staff	12	Other production staff	20
SALES & MARKETING		Semi-skilled operators	423
Senior Managers	1	Toolroom & press fitters	120
Administrative & clerical staff	3	Maintenance workers	69
HUMAN RESOURCES		Crane drivers & labourers	19
Senior Managers	1	**ENGINEERING**	
Managers	1	Managers	1
Staff	2	Engineers	13
QUALITY ASSURANCE		Secretarial	1
Quality & industrial engineers	13		
QC Inspectors	17	**TOTAL**	763

[4] The low number of women employees exemplifies a gender bias which is typical for the auto industry in the UK. Chapter Eight explores this in more detail.

The shop-floor was 100% unionised. The TGWU represented semi-skilled production operators whilst the AEEU covered all skilled workers. When CarPress acquired the Llanelli factory it immediately derecognised MSF in the office areas. Despite this, 95% of MSF members retained their membership.

When the factory was built in 1961 it was regarded as one of the most advanced press and assembly shops in Europe. The long, rectangular main production building divided exactly in half between the press and the assembly shops. Bottlenecks and buffers notwithstanding, it was designed to receive steel coil and strip in the goods inwards bay at one end of the building and then, in the course of the production process, material would flow through the two main shops eventually arriving as completed assemblies on the despatch deck at the opposite end of the building. A novel, underground scrap recycling system operated in parallel with this theoretically perfect flow line process. With each press operation, scrap steel fell through machine-side slots in the press shop's suspended floor. Then, by means of a Heath Robinson-type arrangement of integrated V-channels and conveyors, the scrap was automatically transported to a powerful 4-ram hydraulic baler which compressed it into large cube blocks for re-cycling.

The Press Shop

The main press shop contained 109 presses. These ranged from 30 to 1100 ton capacity. Smaller 30 ton presses were used for blanking operations, that is, cutting steel coil to the required outline dimension for the subsequent full press operation. The main machines were either motor and flywheel or hydraulic ram presses ranging

from 250 to 1100 ton capacity. They were located along 3 bays and arranged in groups of 4 or 5 machines along 17 straight production lines.

The process of manufacturing a complex pressed part, such as a car door, requires a line of presses each set up with a different die designed to press the blanked steel into a particular shape. As Williams et al. (1994b) have observed, this process has hardly changed over the past 50 years. Each part travels once through the line of presses receiving successive 'blows' from the hydraulic rams so that the required shape materialises at the final press on the line. The CarPress shop also housed one line of Swedish-made Dopper automatic transfer presses which can carry out these successive operations within the same press. But most of the shop was organised along traditional lines with each group of presses working in tandem and linked by portable conveyors moving the steel parts from machine to machine.

The press shop operators worked an alternating day and night shift system. Each shift comprised 85 operators supported by supervision. There are, of course, many additional tasks to be performed in the steel pressing process by toolmakers and toolsetters, maintenance workers, crane drivers, fork lift truck drivers and so on, all of which are considered later. But the central labour process belongs to the press operator. Their machines dominated the whole factory. They stood as towers of hard metal and oil-based grime, generating a continual rhythmic din of muffled thuds and metallic strikes as their rams cycled every 4 or 5 seconds of the working day.

The shop typically achieved 1 million 'blows' on a weekly throughput of 800 tons of steel. To accomplish this, operators worked with speed, consistency and efficiency. Many of them performed in pairs. At the first press along a typical line of five, operators standing each side of a conveyor would pick up the first blanked steel sheet, place this into the bed of the press so that it sat correctly on the lower die (or 'tool') and then activate the ram with a single push-button electrical switch. Immediately, a metal safety bar would be released and come flying upwards to hit out of the way any unlucky operator who might have absent-mindedly remained by the bed. Once the ram cycled the operators pushed the pressed part out on to the next conveyor belt at the opposite end of the press bed and repeated the whole operation by loading the next blanked sheet. The same task routines were performed at each press down the line.

Williams et al. (1994b) argue that although the efficiency of press shops may differ on an international basis because of variable machine set up and downtime performance, the actual speed of the press operation tends to be a universal, as it is technically determined by press design, and in particular, cycle time. However, although this may hold for some automated presses, the argument generally fails to take into account the impact of capitalist social relations and the accompanying capital-labour conflict over the speed of work, as the next chapter will demonstrate. In fact, the speed of the production operation in the CarPress press shop was a function of both the targets or 'scores' set by management and the variability of labour power, as well as cycle times. But it was always rapid. Press throughput could vary between 100 and as much as 1000 parts per hour, according to the complexity of part design. A typical rate was about 350. That is, 6 parts, or 6 of the above task routines every minute. Therefore, it

would be misleading to describe the physical labour process of the press operator purely in terms of the simple co-ordination of a few basic tasks. It is a process that is characterised by a rapid tempo and consistent body movement; as the operators handle heavy steel parts their bodies rhythmically sway in and out of the presses between conveyor and press bed, at all times avoiding the bruising knock of the safety bar.

The work is degrading and de-humanising. It is the strength of organised labour rather than any objective task assessment which enables the workers to defend their semi-skilled status. The production operators themselves sardonically dismissed any alternative interpretation of their work. The following view was typical:

> So you people talk about job enrichment! What's that supposed to mean? You should come down and work on our line for a few days and then maybe you'd see some sense. I mean, all you're doing is feeding fucking parts into a machine and pressing buttons all day long. How can you ever get any satisfaction out of that?

Marx (1976) wrote that, 'in the factory we have a lifeless mechanism [the machine] which is independent of the workers, who are incorporated into it as its living appendages' (p.548). Although few of CarPress's workers will have considered reading this first volume of Capital, their working lives, to this day, are still reflected in its pages. Many spoke of the physical fatigue caused by 'being on your feet all the time' and a mental fatigue resulting from the boredom of being 'being married to your machine'. Another press shop operator:

> You see, as an operator you're just an extension of the actual machine, you're not a person. As soon as you clock in each morning you switch off, you just leave your brain at the clocking station.

The operators continually complained of being treated as numbers. And this was not just in the clichéd sense of your number on the clock card. Most presses were fitted with clocks which register the hourly quantity of parts produced. These facilitate calculation of operator and plant performance, and therefore serve as precise little instruments of management control. Some CarPress managers were so obsessed with production and productivity that their attitudes to the shopfloor workforce really were conditioned solely by the numbers on these clocks. As another operator put it:

> I'll tell you what I think of this company. This company treats people as numbers and it's numbers we will always be. It doesn't care about me as a human being. The only thing that this company and it's management are really concerned about is the number that's on my clock at the end of the day. Nothing else.

The Assembly Shop

The organization of production and technology in a body assembly shop is more complex than a press shop's simple arrangement of rows of presses. The basic manufacturing process consists of welding together the different pressed parts and components required for the manufacture of car body assemblies. For body-in-white plants, 3 production stages are needed for this. Firstly, pressed parts are welded together to form sub-assemblies; these sub-assemblies are then welded together along with additional components, such as threaded fasteners, to form major parts like doors

or sub-frames; and finally, these undergo different labour intensive metal finishing processes, such as de-burring, smoothing and small dent removal, all performed with the use of a variety of heavy hand tools.

Jurgens et al. (1993) have identified three levels of welding mechanization in the modern car industry: manual welding guns; robots; and multispot welding processes. CarPress used all three of these. The assembly shop contained 60 VW pedestal welders which were fairly small machines with changeable jigs using spot welders activated by hand levers. It also housed 60 hanging gun spot welders. These were suspended on the end of high voltage cables above the operators' heads and pulled down to the jigs by hand. In addition, a series of welding technology investments in the 1980s and 1990s made available 20 multi-welders (which accomplish more than one weld simultaneously); a robotic automated transfer line for high volume production; and clusters of robots for smaller volumes. The shop also used standard CO2 welding technology in a series of bays.

In their analysis of the restructuring of working practices in the industry, Jurgens et al. highlight, inter alia, the interrelationship between specific national and local corporate technological strategies. In particular, they identify a tripartite division between a German - and to a lesser extent American - reliance on investment in modern automated transfer lines; a Japanese preference for the modernised organisation of existing technologies; and a less coherent British position, which, lacking sufficient resources to follow the German path, is therefore attempting to imitate the Japanese,

albeit in piecemeal fashion. In a curious way, the CarPress assembly shop provided a microcosm of this.

The most advanced technology in the plant was used exclusively for a multi-million pound contract to manufacture dashboards for Opel in Germany. It consisted of a dedicated robotic transfer line employing discrete groups of teamworkers welding together different sub-assemblies and feeding these into the automated final assembly system.

Two groups of teams responsible for producing different body-in-white parts for Toyota and Honda provided the Japanese representation. Although the Honda team relied on advanced, more flexible robot systems, emphasis in both sections was placed on the rational organization of discrete welding units rather than automation.

Finally, the largest areas were 'British' and dedicated mainly to Rover production. These comprised row upon row of the older welding machines, often manned by the same operators day in day out. Apart from the Press Shop, it was in these areas that the CarPress managers were particularly intent on introducing teamworking and other new working practices.

This segmented work organization had little impact on the basic physical labour processes in the assembly shop. Although the Opel and Japanese teamworkers took on a number of additional tasks which will be considered in Chapter Six, the basic task routines nevertheless remained constant across the different assembly sections.

Once again, the work had a low skill content. Operators would simply pick up the necessary pressed parts and metal fasteners from line side pallets, place these into their machine jigs and then activate the weld by either hand gun, pedestal arm, or push button switch. Management-set targets aimed to ensure that operators maintained this cycle, typically, every 12 seconds of the working day. Although to the observer, assembly work appeared less arduous than press shop work, most operators experienced it as pure drudgery. As in the press shop, it was economic compulsion and the crack of the foreman's whip that kept many on their toes, as the following comments demonstrate:

> No, there's no job satisfaction here. How can there be? We're not involved in the job at all. I tell you, the management here are all fucking pigs. I mean, they say to you "right you go over here and you over there and work". They don't care about you at all. All they want is the score out, you do the score and that's it. Basically, they treat you like a machine, like a robot. I'm afraid the style of work is totally monotonous and if unemployment was lower I'd be out of here like a shot. And I'd work for less money.

And another:

> I come in every morning and I'm usually on a dreamer. It often takes me 2 hours to get going properly. It's the same job, week in week out, there's never any change. And it's a low skill factor job. You know how to do it inside 10 minutes, all you need is speed and synchronisation. So the satisfaction is in the pay and the knowledge that you've got a good paying job. There's nothing else.

Sometimes, in order to balance production lines, the foremen would lend and borrow labour across the press shop-assembly shop divide. However, the press shop workers

were not keen on this; they tended to look down on their assembly shop colleagues because for some men, heavy manual work carries a certain prestige. As one said, 'we're handling 10 tons of steel per shift and that's heavy work I can tell you...next door they're doing women's work playing with their little nuts and little bits of metal'. The lack of any dignity in mass production labour, the boredom and relentless grind of the work, often gives rise to such irrational internal working class divisions. In fact, the work in the assembly shop, like the press shop, was neither *men's work nor* women's work. It was just hard work.

Plant Maintenance and the Toolroom

CarPress employed 189 skilled workers, all men, in its maintenance and toolroom departments. Some of these tradesmen were specialist electricians, electronic technicians and mechanics; others, over a number of years, were forced to bridge the traditional electrical-mechanical divide by learning new technical skills outside of their particular specialisms. During the 1970s and 80s, such workers fought hard to maintain some control over their specialist skills and through this to retain a certain dignity of labour that is absent from the production line (Beynon 1984; Willman and Winch 1985). But at CarPress, as we shall see in Chapter Six, de-skilling and multi-tasking are now a greater threat than multi-skilling.

Indeed, for many of these workers, and even some of their sympathetic managers, the changes were seen as a function of the growing domination of mass production over the supportive craft functions. As the maintenance manager complained, 'unfortunately, in this place, production is the God that drives the whole thing. We

seldom have any windows during the day that enable us to get on to the machinery to do the essential preventative maintenance work'. Because of this, many CarPress maintenance workers harboured increasing resentment over the resulting stress, work intensification and irrational marginalisation of their essential work. One fitter put it like this:

> The work was more relaxed here years ago and there's a simple reason for that. There were just more people working here. Now it's got a lot tighter. The company has cut down on the workforce drastically. So the whole workplace has become stressed up due to a sheer drop in numbers while at the same time our workload hasn't dropped at all. They're still running all of the same machines flat out. If anything they're running them without breaks more than they ever used to.
>
> And it's a different firm now. It's more stressful being a maintenance worker because there's no real preventative maintenance being done. We can't do it because we don't have the materials or the men. So what we're doing is fire fighting rather than fire preventing. They just expect us to come running when things begin breaking down.

In most auto plants, toolrooms are responsible for manufacturing and maintaining press dies and welding jigs. The work demands a range of predominantly mechanical skills in fitting and machining. At CarPress, the toolroom's main function was restricted to the maintenance and installation of the plant's 1200 press dies and 600 assembly jig fixtures, rather than new die manufacture. For, in the interests of capitalist efficiency and profit making, the factory, like many others, was now sub-contracting die manufacture to engineering specialists. By depressing wages and conditions, these firms were able to capitalise on their low prices. Not surprisingly, many of the toolmakers resented the dilution of skills that accompanied these changes. One commented:

> We used to be real toolmakers. That was our job, our craft. But these days there's no money or investment going into the shop at all. The company's no longer prepared to invest in new machinery because most of our toolmaking work is now sub-contracted. Don't get me wrong, refurbishing has always been part of the job here but we've also had real toolmaking to do as well. Now all it's about is re-grinding and first aid and this has resulted in a definite loss of skills. I just think that nowadays we seem to be doing everything but toolmaking.

And another:

> I think there's one sort of teamworking that's okay. When we were under Austin Rover we were always doing everything for ourselves. We'd make new heads and other parts, we would all chip in doing different jobs. But now all this work's being sent out, we've lost it. The management are always telling us that it's only chicken shit but we know it's not, it's the quality work that's going.

Many of these tradesmen felt that their jobs and skills were coming under threat from internal sources as well. Since the Rover sell-off, the organization of technical work in the engineering and quality functions had undergone some significant changes involving a weakening of the demarcation between shop-floor and office. For example, one of the more satisfying elements of the toolmaker's job is the testing of die prototypes for new part designs, or 'tryout' as it is called in the trade. The careful adjustment and modification of dies, jigs and machines involves a wide range of practical and reflexive skills. However, despite all the fashionable talk of a post-Taylorist synthesis of the conception and execution of tasks, many CarPress toolroom workers were discovering that the restructuring of the relationship between shop-floor and technical workers was, if anything, acting to reinforce the de-skilling process. CarPress's engineers were colonising 'tryout' work for themselves. A toolmaker:

> It seems to me that the toolroom is just full of white coats and white collars these days. They all seem totally unaffected by the cuts. Maybe it's because the managers are empire building, I don't know. But it's also because the engineers are taking over the best of our work. They are. They're taking the work that needs all the ideas and real skills, the tryout work. It's the sort of work that needs a bit of creativity. But now we're losing that as well.

Engineering

These changes in the toolroom, and the accompanying restructuring of work in CarPress's office areas did not necessarily confer enhanced skills and opportunities on all 137 staff employees. Most of these were managers, supervisors and engineers employed in production, engineering and quality functions with a small number of supporting administrative staff. Despite the above shopfloor resentment, many of these workers were also experiencing their own particular forms of loss of job control and skill. The case of the engineering department was typical here.

Under the previous Rover management, the department was involved solely with part design. In those days the drawing office was fairly large, housing mainly component designers and jig and tool draughtsmen responsible for designing press dies and welding machine fixtures. Associated questions of sales and project management generated remote problems safely located somewhere in a Midlands office block. The CarPress take-over changed all of that. The Engineering Director put it like this:

> After the take-over we suddenly changed from being a large satellite manufacturer to being a supplier to a range of customers. So we had to change our philosophy from one of volume supplier to one of quality supplier. We had to suddenly start thinking about the customer's

> needs. And this involved a major cultural change in relation to both product and financial questions. We had to become a commercial enterprise virtually overnight. Basically, it's now about customer engineering.

For the engineering department, this meant assuming overall responsibility for the management of the whole contract from initial conceptualising all the way through to production and sales. What the business schools like to call 'simultaneous engineering'. CarPress's design engineers became 'customer engineers', learning the disciplines of contract, customer liaison and product management as well as the prototype development and 'tryout' work described above. However, this did not necessarily have a positive impact on skill and job content. Although the company introduced CAD technology and other advanced information systems, the level and quality of design work diminished. On occasions, the department would 'get the envelope' from the customer, designer-speak for receiving the basic conceptual parameters from which draughtsmen and women generate their drawings and specifications. But increasingly, any design work of substance was being transferred to external contractors.

Contemporary analysis of these types of changes tends to be driven by an assumption that the demise of old craft skills, whether in the drawing office or on the shop-floor, is a sign of the inevitable progress of advanced capitalism. This is not in the negative sense of the 'progress' of capitalist accumulation and control outlined by Braverman (1974); indeed, for some writers, it is not something to be regretted at all. Instead, we are often asked to accept the restructuring of the work of core employees as an accumulation of new responsibilities and new knowledge-based skills which more

than compensate for the loss of traditional craft expertise. For example, Lash and Urry (1994) have argued that in Japanese companies such changes bring workers into an increasingly skilful interaction with different information intensive systems. Through these reflexive processes, Japanese workers and their employers are held to benefit from an 'accumulation of cultural capital' in the form of new training, new skills and so on.

Although the work of the CarPress engineers underwent a similar transformation, many did not see these changes in such a positive light. The following view of a tooling engineer typified the general bitterness caused by the loss of draughting skills:

> It's definitely changed over the years. We used to be far more involved in design. Previously a lot of the design work would be done in house, or it would come straight from the customer and we'd do some modifications. But now we're only working on the management of new projects. These days, the tooling's designed by whoever, it's made by whoever and handed straight over to production. As I see it, the whole thing's just turned into cheque book engineering.

And:

> I suppose it had to happen. A lot of firms seem to be getting rid of design these days. It's being sub-contracted out all the time. Personally, I prefer it as it was. I was brought up in a real drawing office environment. I've got nothing against the system, I suppose it works, but there's much less job satisfaction now and a lot less skill. Our job used to be about starting the job off on the board. We used to put ideas on to paper with drawing pencils and then you'd gradually develop the job yourself and see the thing materialise. But not any more.

This is not to say that CarPress's engineers dismissed out of hand the new ways of working and the responsibilities that went with them. Like many engineers, they enjoyed rising to the challenge of solving new sets of problems. It was just that they felt the process had limits of acceptability. And whilst human interaction with new computer information systems could be appealing, many nevertheless resented the de-skilling which accompanied the loss of the primary interaction between engineer and machine. They could not understand how anyone could be classed as a skilled engineer without having a practical appreciation of machinery and tooling and a knowledge of the technical parameters associated with the different production processes. But as part of its internal restructuring, the engineering department began to recruit such individuals, young 'customer engineers', well versed in the procedures of contract management but lacking a basic understanding of practical engineering principles. The experienced engineers were clearly disgruntled at the divestment of 'cultural capital' which this approach signified. As a project teamleader put it:

> Most of these youngsters might have good qualifications, the HNCs and degrees, but none have the formal engineering training and the skills that go with it. The skills involved in actually understanding a process, understanding how a machine tool works, how a press works, getting close to it and understanding the technical problems that you get with these types of machines...I suppose it's a reflection of the way the job is changing. I've got to admit, many of the youngsters may be sharper than us at costing and estimating. But they're not engineers.

THE IMPACT OF JAPANESE MANAGEMENT

The foregoing preliminary account of the organization of work at CarPress sets the local context for the process of 'Japanization' which unfolds over the next four chapters. It also demonstrates that irrespective of the impact of Japanese management techniques, the plant's work organization has not remained static since its inception in 1961. The advent of new technologies, new product markets and new customer relationships along with competitive pressures for demanning and a 'commercialisation of the labour contract' (O'Connell Davidson 1993) through external sub-contracting, have all made their impact on the labour process. So has internal job re-structuring. But we also need to consider the wider environmental context of the change process and how external contingencies at the global and national level, particularly the growth of Japanese inward investment, have affected the local factory and local attitudes.

The British autocomponent industry has for some time been caught between a pincer movement. This consists of a general decline in the fortunes of the hand that feeds it, the British auto assembly sector, and the simultaneous propensity of these assemblers to both reduce local content and squeeze the prices of the remaining UK suppliers. As Amin and Smith (1991) have outlined, since the early 1970s, the UK has gone from being 'a sizeable manufacturer of cars which once dominated the domestic markets and exported over a third of its output, to a significantly smaller actor in both the domestic and export markets' (p.174). At the same time, the auto sector multinationals have rationalised capacity and restructured their operations to generate

plant-based economies of scale through either task or car model specialisation. Amin and Smith point out that this process of vertical integration put many British autocomponent suppliers out of business during the 1980s. But it also had a fundamental affect on remaining suppliers of the likes of CarPress. The major car assemblers reduced their supplier volume by awarding larger and longer term contracts to an upper tier of prime suppliers. In so doing, they were able to exert significant control over these suppliers by overseeing price reductions and insisting on better quality, innovative capability and delivery. This is not a process of corporate intervention that is peculiar to the Japanese, although they are particular experts at it. For example, Opel, one of CarPress's largest customers, recently embarked upon a major internal efficiency drive along these lines. It resulted in significant cost reductions of bought-in parts (Parkes 1993).

Japan's phenomenal success in global car exports coincided with these changes. Between 1973 and 1985 the Japanese auto industry expanded to such an extent that it eventually controlled 29% of global output and totally dominated world intercontinental trade movements (Bloomfield 1991; Jurgens et al. 1993). This constituted a real threat to Western manufacturers. It contributed to the emergence of an ideology of 'factory survival' in the West, where managements increasingly raised the nightmare of superior Japanese productivity to expedite job rationalisation and the introduction of new working practices. The history of low wages, work intensification and exploitation of small sub-contractors that underpinned this Japanese 'miracle' was conveniently overlooked (Garrahan and Stewart, 1992).

Managerial apprehension of Japanese industrial expansionism also had a material impact. For instance, in 1993, the European Union commissioned the influential Boston Report into the competitive gap between European and Japanese autocomponent suppliers. The report's conclusions, right or wrong, that a massive productivity gap in favour of the Japanese required halving by 1999 if the European industry was to survive (Done 1993), started to provoke corporate action. CarPress's Operations Director commented on this and related influences:

> Yes, Krupp are very heavy on the Boston Report at the moment. They were one of the driving forces behind it in the EC and it's certainly having an impact here. And there are similar influences elsewhere. For example, Rover with their RG2000 quality audits and Ford are the same with A1. They're always trying to drive down our costs. They can be a bloody nuisance as well. Particularly when times are bad in the industry you tend to get the representatives from some of these customers coming in and crawling all over you, looking at your quality procedures and working practices.

Perceptions of superior Japanese management performance, therefore, contribute to the diffusion of management practice. Also of importance is the sheer presence of the Japanese auto assemblers in the UK. It has been estimated that by the late 1990s, something like £2 billion worth of EC-sourced components will be flowing into the three Japanese assemblers in the UK - Nissan, Honda and Toyota (Griffiths 1992). But those British suppliers who are successful in gaining prime supplier contracts are also paying a price. With the balance of power between these different capitals clearly in favour of the Japanese assemblers, suppliers can no longer fix, or even negotiate, component prices in the traditional manner. Instead, they are forced to open up their books to the Japanese, allowing the latter to determine how costs and prices are

calculated, and through this to set in motion a price lowering process. They are also forced to accept the intrusion of the Japanese customer into the area of monitoring quite intimate aspects of their quality and performance (Done 1990; Griffiths 1992)[5].

Too much of the contemporary debate on the 'Japanization of British industry' has dwelt solely on the extent of Japanese management innovation without attending to the pertinent practical question of how the *process of diffusion* between Japanese-owned or 'Japanised' firms and British firms takes effect. At CarPress, diffusion from the likes of Toyota, Honda, Rover and Opel, was accomplished primarily through the development of the type of close customer relationships outlined above. These relationships were realised through determined sales strategies, persistent customer liaison and the additional highly proactive role of such external agencies as the Welsh Development Agency[6].

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[5] This approach to the control of suppliers bears many similarities to current practice in Japan, where suppliers are forced to relinquish their freedom and independence once a contract with any of the giant Japanese corporations is signed. As Sakai puts it, suppliers are 'told what to make, when to put it on the line, and how much it will get for delivery. If the company that placed an order feels a profit squeeze, it can easily order the sub-contractor to reduce its final price. If hard times continue, the larger company can demand yet another cut. If it gets to the point that the subcontractor is losing money on each unit it's producing and has cut expenses and streamlined production to the utmost, the "parent" company could demand that it buy some new piece of equipment to increase productivity' (1990, p.40).

[6] Significantly, just as the British state has taken up a proactive role in enticing Japanese firms into the UK in order to weaken organised labour, its Welsh arm, in the form of the Welsh Development Agency, is equally active in securing the adoption of Japanese-approved new working practices in British-owned suppliers in Wales. The WDA has now established a 'Source Wales' programme aimed at persuading major manufacturers to source their components locally through the promotion of 'best practice' within Welsh suppliers.
To achieve this, Source Wales has set itself up both as a broker for customers and suppliers and as a management consultant. Its officials move on to the premises of an enlisted manufacturer and act as a temporary procurement arm of that customer. Simultaneously, Source Wales acts as management consultant to potential suppliers, advising on the restructuring of management practices and providing the necessary resources, such as TEC management training. It then attempts to bring together approved suppliers with enlisted customers on a long term contractual basis. Its officials stress that Japanese companies tend to be as much interested in potential suppliers' quality of management as their quality of production. That is, they take a particular interest in the ability of managements *to push through* some of the changes in working practices necessary for achieving longer term quality and production

Rover was the chief protagonist in this change process. The introduction of new working practices at CarPress, like many other British companies, has been slow, incremental and subject to both management incoherence and periodic trade union resistance. But certain defining moments in the Llanelli factory's recent history did represent significant catalysts of change. Paradoxically, one of these was Rover's decision to sell the plant. This was not done in response to any overcapacity of capital in relation to product demand; apart from securing immediate financial gain, the sale acted to commercialise the Llanelli labour contract, squeeze unit labour costs and thereby, both reduce Rover's overall production costs and increase its profits.

A post-privatization, long term customer-supplier relationship was forged. Although Rover remained CarPress's largest customer, the nature of the commercial relationship changed. CarPress's Production Manager summed this up in the following way:

> When we were a Rover plant we produced no budget accounts to speak of. We were dealing purely in wooden dollars, supplying parts to Oxford and Swindon. Now things have changed. Everything has got to be justified. We're accountable for all our budgets and costs and we're all far more commercially aware than we used to be. Now the site is a profit centre and each section within it is a cost centre so we've had to become more open with our figures. It also means that we've been forced to keep to tighter profit margins which Rover and the rest of our customers enforce on virtually every contract. The result of all is that we now have to get smarter in the way we manufacture.

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standards. (Field notes, interview with the Director of Source Wales, Welsh Development Agency, 2.3.94).

Rover took a keen interest in the methods used to achieve these cost reductions. As the firm at the forefront of the 'Japanization of work organization' in the British car industry (Oliver and Wilkinson 1992), it followed the Japanese practice of demanding surveillance of CarPress's attempts to introduce changes on the shopfloor. Various mechanisms were used to accomplish this. CarPress managers and engineers attended many routine meetings with Rover liaison staff to discuss matters of product and process quality including 'cost-down', the euphemism for reducing part prices by intensifying work effort. As we shall see in Chapter Seven, Rover's interventions even extended to direct interference in shop-floor disputes.

The increasing use of a new style of factory audit, extending far beyond matters of product quality, constitutes another significant supplier control device. Rover applies its RG2000 audit to every one of its prime suppliers. The company's audit personnel regularly visit firms like CarPress every year, armed like industrial bureaucrats with their packs of assessment forms, audit criteria and interview notes and making critical judgements on working practices, personnel policy and business performance[7]. They are allowed to wander around the shop-floor at will and to interrogate who they think fit. The auditors wield a significant influence even though their stringent demands for change may not always correspond with the independent business aspirations of their

[7] These audit criteria encompass a variety of different indicators of the restructuring of work and employment relations each of which are marked on a 0 to 3 score. For example, there are sections covering: the risk of discontinuity of production (which includes available means of strike-breaking); personnel policy matters which include health and safety, the behaviour and appearance of employees, single status, the physical integration of management with the workforce locations, company communications and employee involvement; and work changes which include wider questions of the development of coherent strategies for organizational change as well as particular work practices such as teamworking. (Source: Section 5, Rover RG2000).

suppliers. Not surprisingly, the audits are viewed with some ambivalence by the CarPress management. The Personnel Manager said:

> Yes, I must admit the Rover people have had a major impact because they make you do things you probably would not otherwise do. The strength of this influence often depends on the ability and perceptions of the auditors. The Rover auditors are of course particularly influential because they are our major customer and we're therefore subject to regular in-depth checks of company practices.
>
> But I do find them annoying sometimes. They tend to display this patronising, holier than thou, follow my model attitude. And in a sense, all they're doing is giving you all of these building blocks to satisfy their own audit criteria but there aren't any connections. Sometimes, too much of the change here is being driven by an obsession with the need to comply with the customers' quality audits. Unfortunately, we're not being allowed to sit back and take a look at what changes are really necessary for this company to succeed.

ATTITUDES TO JAPANIZATION

CarPress's Japanese and German customers applied similar instruments of surveillance and control over the factory's product quality, process and business organization. As a result, the density of interaction between these major customers and CarPress managers and technical staff reached relatively high levels. This enabled many senior staff to formulate their own subjective assessments of Japanese management style and innovation. Dialogue with representatives of the customer was commonplace, not only on CarPress's premises but just as frequently at the customer's factory. Apart from regular meetings at different Rover plants, most managers and technical staff visited Toyota and Honda's British factories at some

time; many did this on a routine basis to address both substantial problems and some of the minutiae of contractual, engineering and quality matters. A relatively high number of engineers and managers also visited parent factories in Japan itself.

The diffusion of ideas and ideology followed further parallel routes. Some managers were real bookworms, avidly devouring the latest business school offerings on the 'Japanese miracle'. Many had the seminal works of Dr Deming and the more quixotic Tom Peters on their bookshelves. In addition, the majority of managers and senior staff, and even some shop stewards, had at various times attended local seminars on Japanese management practice organised by the WDA and other business agencies. More recently, as we discuss in Chapter Six, CarPress established a series of 3 day courses on teamworking and other new working practices for managers and a minority of shop-floor workers. These were organised by a local brand of the ubiquitous British management consultant with additional input from Honda and Toyota.

Although many managers and engineers expressed admiration for certain aspects of Japanese management performance, and most accepted the drive for a restructuring of work and employment relations on the CarPress shop-floor, one could nevertheless discern an irritation with the notion that British companies should blindly follow the Japanese path. On the general level this was often expressed somewhat crudely in cultural and nationalistic terms. For example, a Production supervisor complained:

> Okay, maybe some Japanese companies have got some good ideas, though I suspect as many of them are American as Japanese. But I would have thought that this country, as pioneers in

> the industrial revolution should have some ideas of its own rather than follow the lead of some old third rate country. Where have our ideas gone?

And a project engineer:

> No, I wouldn't want to see a 'Japanization of industry' as you put it. No, we're a different race, we're different people. We couldn't accept all the regimentation that you get over there. They're all "yes men". They like taking their orders. And they don't complain or offer any resistance. They don't seem to be the type of people who can take decisions as individuals. Everything's done in groups and all their decision making takes a hell of a long time.

One could also discern a resentment of any implication that British managers were inefficient and weak 'labour pushers' by comparison. The different CarPress managers consistently criticised the generally held view that Japanese plants are more productive than their British counterparts in terms of profit performance and both capital and labour utilisation. Many demanded to know why the profitability and productivity figures for the UK's Japanese transplants are not in the public domain. Similarly, many provided anecdotal evidence of underutilisation of capital in the Japanese plants they themselves had visited.

Moreover, with almost universal conviction, these managers and engineers rejected as pure myth the idea that Japanese firms are structured around flat hierarchies. They argued that Japanese managers benefited from a superior number of staff supporting the function of control over the production process. This, of course, is congruent with the evidence provided in Chapter Two. In contrast, it was the understaffed British

managements, rather than their Japanese counterparts, who suffered stress and overwork. The CarPress Production Manager expressed it this way:

> In any case, not all the Japanese firms are lean producers. As far as I'm concerned many of them are mob handed. Take Toyota for example. The management seem to have 3 or 4 levels of staff to back them up. Far more than we have here. And they're certainly not as efficient as they make out. Personally, I don't believe from what I've seen at Toyota and from what I've learned elsewhere that the Japs work their men as fast as the equivalent CarPress worker.

And a similar view from a robotics engineer:

> Well, I've visited a number of plants in Japan and they all tend to give me the same impression. You talk about lean production but there's always plenty of people doing the same job. They never move out of the company and they never seem to change jobs. In some respects I don't suppose you can blame them. Their kids go to the company school, they went to the company school and they all live in their company houses. So they start with a company and never leave it. But many of them seem overmanned to me. When I was there for meetings with the customer I'd be covering 6 or 7 disciplines. Electrical work, electronics, welding and so forth. But they couldn't understand this approach. They always had the same men strictly covering the same narrow range of disciplines.

Despite these caveats, the management seemed convinced that shop-floor working practices and employment relations required a shake-up if CarPress was to rise to the challenge of Japanese greenfield, hi-tech investment. Throughout most of its history, capital investment in the British car industry has suffered at the expense of corporate demands for immediate profits and dividend payments (Greenhalgh and Kilminster 1993); and despite recent waves of international modernization, many British plants have retained their low investment records (Jurgens at al. 1993). In keeping with this tradition, the CarPress board of directors consistently refused to consider long term

capital investment on a coherent, strategic basis, preferring the cheaper option of organizational change and specific technological investments when demanded by the customer. Needless to say, CarPress's shopfloor managers resented this. Many wistfully reflected on the Japanese propensity to carefully plan and financially support the introduction of sophisticated dedicated capital equipment. As one quality manager said, 'in this place, things are antiquated in comparison...what we need is an injection of modern technology and Japanese philosophy'. But in truth, the management was more envious of the Japanese capacity to exploit young, malleable labour on its greenfield sites.

Although, on the basis of their regular visits to different Toyota and Honda plants, Japanese transplant workers were variously described as, 'brainwashed, vacant and empty', 'fully indoctrinated' and 'behaving as robots', this does not mean that things would be any different if these workers were placed under the control of the CarPress management. Far from it. In reality, any expressions of 'pity' merely translated into regret that the CarPress workforce could not be equally subordinated. Indeed, one objective of the change process was to undermine the defensive, collectivist culture on the CarPress shopfloor. As the Operations Director expressed it:

> We need to change our shop-floor culture by getting the workers out of this plant, by taking them to some of these Japanese factories. They've never left it in their lives, they've never seen anything else. And the problem we have is that our younger recruits are always gradually contaminated by the older workforce, they rapidly get 'queered' so to speak. In the past, any evidence of individual initiative has always been swamped by an attitude of "protect your brother".

What were the attitudes of the shopfloor workers to notions of 'Japanization' and change at the workplace? Were they as uniformly unyielding as the above comment suggests? In fact, as we shall see, although they revealed a clear sense of collective interests, in terms of the demand for equality and greater control over their working lives, initially there existed no consensus on whether 'Japanization' might support or hinder this. Why was this?

Beynon's (1984) description of the 'factory consciousness' displayed by shop stewards at Ford suggests that whilst these activists did not always cut themselves off from political action outside of their immediate work environment, their class politics and ideology were nevertheless essentially factory-based. This analysis can also apply to the CarPress rank and file. And it has a particular bearing in the context of the 1990s, where the temporary demise of radical left wing politics and extra-parliamentary working class activity leaves little for factory workers, or their stewards, to cut themselves off from. Since the Rover sell-off, the CarPress shop stewards enjoyed few opportunities for joint plant campaigns or even political discussions with fellow car workers from other plants. Similarly, unlike the management and technical staff, their members had virtually no contact with the workers employed by the different customers who were intent on changing CarPress's shop-floor culture. Apart from one or two employees who had friends or relatives working for a Japanese company, the only information on the nature of Japanese practices came from the media and the internal tendentious source of formal company communications. Therefore, although the introduction of Japanese management innovations had damaging implications for working class interests on the CarPress shopfloor, many of

the recipients of these changes accumulated little of the required knowledge for developing a coherent and united political response. The extant 'factory consciousness' was starting to work against them. A quite critical example of this is discussed in Chapter Seven.

Despite this, a good number of the workers interviewed did display a clear antipathy towards the idea that their working lives should become 'Japanized'. It reflected a fear and resentment of any imposition of an 'alien Japanese work ethic' which might merely compound the existing levels of stress on the shop-floor. Like some of their bosses, this resentment would sometimes be dressed explicitly in racist terms. As one operator cynically remarked, 'you talk about hard work, loyalty, discipline, but the Japanese are like that aren't they? They all like to get on a daily sweat for a bowl of rice. But that sort of life is not for me, this is Wales not Japan!' Others held equally unambiguous views on the nature of Japanese work intensification and discipline. An assembly shop operator felt that:

> We're told that the Japanese way is the only way to work, that people are happier working for Japanese companies. But I'm not so sure that's the case. They've got this teamworking and they work just as hard, if not harder, than we do. The Japanese are the worse taskmasters of all, they're worse than here. As I see it, in these Japanese firms everything has to be done their way or else. If you don't like it then you either shut up or they show you the door.

And a crane driver:

> I don't know what the Japanese working practices are about. What I do know is that they're continually cutting manning. I know about lean production, it's bad news, it's what they're

> trying on here. It's all threat, threat, threat. As far as I'm concerned the Japanese way is about screwing the maximum amount of work from the minimum amount of men.

However, prior to the introduction of the new working practices, a surprising number of other workers were less critical on these questions. This ambivalence could be partially attributed to a lack of acquaintance with the class-based nature of the 'Japanization' process and to a blind hope that anything might be better than the existing production regime. Such attitudes are not unusual amongst those whose working lives have become grotesquely disfigured by the de-humanising hard work, drudgery and monotony of traditional Taylorist forms of mass production[8]; and they become entirely logical in the context of the coercive forms of management that accompany this.

The relationship between the CarPress management and the shopfloor was indeed characterised by threat, intimidation, fear and antagonism. When given the chance to express themselves during interviews, through discussions on the shopfloor, or through questionnaire comments, time and again these workers referred to being treated as 'animals', as 'cattle', as 'slaves' and as 'Jews in a concentration camp'. Many spoke of management in brusque, contemptuous terms, like the following two assembly shop operators:

> Yeah, I'm talking about fear. A fear of management and a fear of losing your job. I mean the management here are a bunch of fucking liars. You can't trust 'em any further than you could toss 'em. They tell us one thing and you get the opposite.

[8] Parker and Slaughter (1988) discovered similar attitudes amongst workers confronted with new management techniques at the GM-Toyota NUMMI plant in California and at different USA Chrysler plants; the literature suggests that they are also common in Japan itself (Milkman 1991).

And another:

> These managers are pigs. They'll screw you into the ground. All they're interested in is getting blood out of you.

These were not the comments of a small group of marginalised dissidents. They were the views of the majority. One foreman expressed the fear that continually aggressive and arrogant management attempts to exert greater control over the shopfloor were creating 'an evil simmering of hatred'. And so, as we shall discover, they were, to the extent that the most hardened outsider might be shocked by its intensity. But this hatred had meaning and purpose; it did not hit out at everything in its path. It was certainly not 'anarchistic' as some managers liked to refer to it. One toolmaker commented that, 'I suppose if I was a manager I'd probably be the same as them, I'd try and make as much money in the shortest time possible. That's just the system isn't it?' Similarly, another said, 'I know that at the end of the day we have to rely on the man upstairs, I understand that, I accept that. It's just that the man upstairs is a clown'.

These people were not rejecting capitalist managerial prerogative; after all, decades of labourism had seen to that. They did reject the explicit coercion and exploitation that accompanies direct management control but at the same time they recognised that factory production has a social basis in which management has a co-ordinating role. As Beynon (1984) puts it, workers' views on management can have both structural

and moral dimensions, 'the one structural, which places the action of management within the structure of the large capitalist corporation; the other moral, which involves a criticism of the action management takes in the plant and a moral judgement of the managers as men' (p.112). At CarPress, the workers understood that complex production processes require professional management. They did not believe that this was forthcoming from their own managers. Neither did they believe that these managers aspired to any sense of collective morality and decency as the following cry of despair makes clear:

> You just wouldn't believe the attitudes of the management here. They're so defensive. Sometimes, you know, we would like to discuss our work problems with them, we're open to that. But they can't do it, they're not capable of it. They retreat into a sort of defensive shell and not only refuse to talk to you but they end up treating you like shit.
>
> You'd be appalled at some of the things they say to us. You might be working away, sweating like hell probably, and the boss [Operations Director] will walk past you down the gang way and shout out, "I know you're only putting on a show because I'm here you Welsh wogs!" They say dreadful things like that, dreadful language. Outsiders just wouldn't believe it.
>
> So how can you have teamworking here? You know if this were a rugby football team it'd be like your team captain giving you a right dressing down or a kick in the teeth minutes before you're due to run on the pitch. It's not the workforce, it's the management who's got the wrong attitude for teamworking.

In these circumstances it was not surprising that some workers clearly supported the notion of introducing a new style of Japanese management at CarPress. A typical reaction from this group was, 'I like the Japanese way, I like the way the Japanese management and workers are all at one'. Two women in the assembly shop similarly believed that, 'they all work together don't they? They do seem to have a good way of

working, I think it will come here one day, I do hope so', and, 'I honestly feel that the Japanese would look after you better because they treat you all the same'. But these were vague egalitarian aspirations based on hope rather than substance. They were also tempered by a cynical realism, itself conditioned by weary experience of membership of a subordinated producer class in the Western system of consumer capitalism. As a shopfloor inspector put it:

> But the Japanese are a different breed to us, they're brought up in a different way. We're not like that and never will be. Everybody's talking about the Japanese. What's that place called over there? Toyota Town? Where all the workers get their houses, their schools and the rest of it. And all we get is a fucking lousy wage packet and redundancy. And when we get made redundant our managers always get promoted, they never lose their jobs. So as I say, we'll never be like the Japanese, we'll always be different.

In the context of the 'classless' 1990s, some people might be forgiven for thinking that factories like CarPress represent curious anachronisms, abandoned by the new 'soft management' and the supposedly consensual industrial relations environment that goes with it. But, as will become clear, this is too simple a view. The remaining chapters will demonstrate that the politics of production in this factory are not outdated. Its management's attempts to restore the 'right to manage' and exert greater leverage over worker effort bridge a continuum of coercion and control; a continuum spanning the crude macho management of the likes of Michael Edwardes in the 1980s to the more refined contemporary Japanese techniques. It is a contemporary politics of production still characterised by class conflict over the universal managerial objective of maximising surplus value by means of control over the capitalist labour process.

CHAPTER FIVE

LABOUR INTENSIFICATION AND LEAN PRODUCTION CONTROL

> There's two of us in this room who've been working at this plant for 18 years doing the same actual job as we were doing under Austin Rover. But although the job's the same it's become that much harder. Manning levels have got worse for a start and the plant's still being asked to do the same amount of work with the same old machines. So when they cut the manning you then have to cover for A, B and C personnel who have now gone. The effect is that they give you more to do in target hours. And on top of this they give you extra tasks to fit in where you can. For example, during the old days under Rover you'd have quality men walking around doing regular quality checks on your work. And you'd have other admin staff coming around to write up the buy-off ticket to sign your job off. But now we have to do all that sort of extra work ourselves and they still expect you to get your pieces of work out per hour. In fact, you have to get more pieces out per hour. So when the management start to talk about "back to basics" what they really mean is "more work, more pain, less gain". (Press Shop Operator).

> There's certain aspects of the Japanese way I like and certain aspects I don't like. In some respects it's a total culture shock compared to what was going on under Rover. And I mean a real culture shock. I often find that I'm saying to myself, "God, why have I got to work all these long hours? God, why can't I switch off for just 5 minutes during the day and have a chat with somebody?" (Project Engineer).

The seductive maxim 'working smarter rather than harder' has become a mantra of the various apologists for the new management techniques of the 1990s. In fact, as the above comments testify, workers in manufacturing industry, subject to an increased exercise of managerial prerogative in the distinctive political and economic conditions

of the past 15 years, are now working harder as much as smarter. Over this period, British manufacturing industry has displayed a clear tendency towards a reduction in the porosity of the working day which is not always overtly strategic but which instead may occur slowly and steadily, often in an uneven and piecemeal fashion (Nichols 1991; Elger 1990a, 1990b).

Elger's overviews of a number of British case studies suggest that rather than aim for a fundamental workplace restructuring through either technological innovation or work re-organization, employers are attempting to improve productivity through de-manning and task flexibility. These types of changes exhibit a bias towards 'the horizontal enlargement rather than multi-skilling of jobs and towards an intensification of labour, especially via the reduced porosity of work routines' (1990b, p.38). Similarly, in their analysis of contemporary changes to working practices in the auto industry, Marsden et al. (1985) argue that different reports of people working harder are neither here nor there; what is more pertinent is the evidence of additional time people are working, that is, the additional time they actually spend on their feet performing labour, which thus closes up the porosity of the working day. Although such an approach runs the risk of discounting subjective assessments of effort, it does highlight an essential point. That is, what is central to the intensification of labour and therefore more important than the exact nature of the different management attempts to improve productivity and their impact on worker perceptions is, as Nichols puts it, 'that more labour is squeezed out in a given time, or - the same idea looked at the other way around - that the porosity of the working day is closed up as more labour gets squeezed into it' (1991, p.573).

Nichols goes on to suggest that the more mundane, piecemeal changes to manufacturing working practices impact upon general work rates to, if anything, a greater extent than the crude increase of effort brought about by a fear of macho management. That is, as well as raising output per worker by 'speed-up' and multi-machine minding, these new practices act to close up the porosity of the working day by reducing break times; by reducing any idle time in production periods; and by introducing task accretion.

At CarPress, both the macho and the incremental approach to management served to induce a progressive increase in work rates. Some changes were effected by a slow process of chipping away at custom and practice; some were subject to negotiated agreement; and others were enforced by managerial threat and coercion.

During the 1980s, de-manning and the compensatory development of labour flexibility practices constituted principle features of this process as they did in many other British manufacturing plants. But following the change in status of the plant from a satellite pressed part manufacturing operation to an independent first tier supplier feeding a number of JIT final assemblers, the CarPress management faced new pressures to exert greater control over labour utilisation and work rates. In particular, the new demands of the customer, shifts in the nature of the plant's production control system, the inadequacies of ageing machinery and persistent internal and external pressures to drive down unit labour costs all warranted an explicit attack on the production operators' ability to partially control their own working time. This chapter

provides an analysis of the meaning of these changes at the point of production. Chapter Six extends the enquiry to the impact of labour flexibility and new practices such as teamworking on all sections of the CarPress workforce. Rather than treat these processes as unproblematic, the analysis draws out the contradictions and conflicts that accompany the 'Japanization' of work effort.

THE PRODUCTION CONTROL SYSTEM

Production control at CarPress contained elements of just in time organization. Ostensibly, the system did appear to conform to Ohno's (1988) well known supermarket analogy, where the exact quantity of the necessary materials arrive at the factory gates just in time for consumption in the process of production and the required type and exact quantity of finished parts are despatched to the customer just in time for further productive consumption.

The plant developed close, long term relationships with its main steel suppliers in South Wales. Consequently, tightly co-ordinated order/supply arrangements ensured that the necessary sizes and specifications of steel coil and strip arrived at the factory just 4 hours before they were needed for production. At the opposite end of the operation, exact quantities of the required pressed assemblies were despatched to customers such as Rover, Toyota and Honda, four times a day, five days a week.

The external appearance of the CarPress factory production system evoked an image of smooth, flow line, JIT control. However, the process of investigating the inner workings of this black box exposed certain technological, organizational and labour relations arrangements which were more complex, imperfect and troublesome than the business school text books suggest.

Apart from a small number of cell enclaves manufacturing parts for Toyota, Honda and Opel, the main press and assembly shops did not conform to ideal type JIT production principles; most lines operated on the basis of 3 or 4 week cycles. That is, batches of typically 10,000 parts, sufficient to cover 3 or 4 weeks of supply. Machine downtime was the principal constraint here.

In Japan, JIT systems function to provide low cost, low stock production control which is essential for the financial viability of the Japanese multi-model marketing tradition. This in turn relies on small batch production, whose efficiency, as Williams et al. point out, 'rests not on a mastery of production but on a mastery of unproductive time. More exactly, the Japanese do not seek reduced unproductive time for its own sake; instead they try to minimise the wasted breakdown time while what we may call the 'contributing downtime' of set-up is used constructively to secure the downstream objective [of process efficiency]' (1994b, p.64). In their study of different Japanese press shops, Williams et al. found that although machine utilisation time varied between 68% and 85% what united the different plants was their effective use of residual unproductive time, principally to ensure rapid die changes over single shifts.

As a result, the Japan-based manufacturers are able to secure small batch production through technological means.

In the auto industry, Toyota pioneered these flexible manufacturing techniques by implementing Single Minute Exchange of Dies (SMED). Evoking Taylorian principles of rationality and efficiency, Shingo, the founder of the SMED system, argued that it is 'a scientific approach to set-up time reduction that can be applied in any factory to any machine' (1985, p.26). By rationalising the process through a combination of incremental improvements to manual die changing, the introduction of new working practices and the more recent employment of automated die side-loaders, Toyota and eventually many other Japanese manufacturers were able to reduce the set-up time frame from one of hours to minutes (Shingo 1985; Cusumano 1985).

For a large autocomponents plant that was attempting to compete in a highly competitive global market, the performance of CarPress was poor in comparison. Typical machine utilisation rates measured just 49% in 1994. Although long-established continuous improvement SMED meetings contributed to a reduction in the proportion of total working time expended on die changes this was more than negated by managerial incompetence on questions of investment in tooling, machine allocation and labour deployment. The time lost due to faulty machines and tools, machines awaiting new jobs and labour shortages together amounted to 27% of total working

hours in 1993 and 34% in 1994; they accounted for 52% of downtime in 1993 and 74% in 1994[1].

Therefore, as these figures suggest, although the CarPress management was attempting to improve machine flexibility, a lack of both capital investment and coherent planning militated against the process. Consequently, the machine set-up process was relatively backward compared to Japanese automation. For most presses, die changing was a matter of transporting dies from toolroom to machine by a combination of slinging devices, overhead cranes and fork lift trucks; the same equipment was then used to load the dies on to the machine bolsters; finally, teams of toolsetters would carefully assemble and secure the die in a slow process of trial and error, ensuring that it was exactly centred in the bolster and that its shut height was sufficient to yield acceptable pressed parts.

Many of the managers interviewed contemplated these problems with some ambiguity. Few were actually interested in operating a full blown JIT system. In a factory where 'production is God', the manufacturing people perceived such innovations as annoying impediments to output. As one superintendent observed:

> Car assemblers like Honda can be set up to demand say, 100 parts on certain hours each day. But if the Press Shop were to comply in just in time fashion we'd be spending all day setting up machines and not producing anything! It's unworkable. We just haven't got the technology that the Japanese use.

[1] Press Shop Downtime Analysis Sheets, Materials Dept., CarPress Ltd.

In similar vein, CarPress's Operations Director, the man in charge of production, had little positive to say about JIT and other Japanese production control innovations. For him, downtime certainly constituted a problem but it was nothing more and nothing less than lost production:

> Our current downtime adds up to something like 1/2 million blows a week. That's a lot of downtime. It falls into 2 main categories, toolroom problems and physical machine setting. If these times could be halved we'd put in another 300,000 blows per week, no problem.

However, despite these technological complications, both the general impact of global competitive pressures and the particular interventions of the plant's major Japanese and British customers described in the previous chapter forced the management to effect simple cost reductions aimed at improving plant efficiency. Between 1989 and 1993, plant employment declined by 20% and output per worker almost doubled. At the same time, stock and in-production buffers were being considerably squeezed. CarPress managed to double its stock/turnover ratios from 10.0 to 20.6 over this period; work in progress reduced from £1.1 million to £642,000; and WIP/turnover ratios almost trebled. In the context of lean production, stock/turnover ratios constitute significant indicators of productive efficiency and buffer levels (Cusumano 1985, Williams et al. 1992). As Williams et al. have argued, this is because, 'low stocks are an important indicator of the physical integration of manufacturing operations and measures the manufacturer's ability to realise smooth continuous flow in multi-process manufacturing; flow is an important influence on productivity and costs because smooth flow takes out indirect handling labour and allows direct labour to work continuously and efficiently' (1992, p.22).

In a number of ways, therefore, these changes in production control at CarPress were congruent with arrangements in the Japanese transplants in South Wales. The systematic reductions in manning, stocks and line side buffers could validly be described as producing something leaner and, as we shall see, more work intensive, than a customary 'Fordist' mass production operation.

The severe manufacturing constraints generated by the plant's poor record in the management of capital employed contrasts sharply with these statistical indicators of productive efficiency. This contrast will be addressed in due course. For the moment, what should be recognised is that the CarPress management succeeded in raising labour productivity and factory throughput to a significant degree. This was not operationalised in an overtly corporate strategic sense; production control managers introduced their stock control measures and other cost reductions at the behest of external customers rather than CarPress's most senior manufacturing managers who remained obsessed with output quantities. But the crucial point to appreciate is that although the production control system was developing in a piecemeal way and could not be described as 'text book' just in time, the process of stock and buffer reduction had clear implications for the intensification of labour, for the worker's capacity to take an unofficial breather. That is , as Nichols has argued, neither the debates about what exactly should count as JIT (see for example, Jenkins 1994; Wood 1991) nor certain representations of these changes in British manufacturing as improvements in the technical efficiency of management should be allowed to 'distract from their significance for the closing up of the pores of the working day/labour intensification'

(1991, p.589). The impact of these changes upon the shop-floor will now be considered.

LABOUR INTENSIFICATION AT THE POINT OF PRODUCTION

During the course of the research, two questionnaire-based attitude surveys were carried out at the plant (see Appendix A). The first of these (October 1994) asked respondents whether they believed they were working harder compared to 10 years ago. Of the 236 respondents with more than 10 years service, 69% replied 'yes', 27% 'no' and only 4% were undecided. The shop-floor operators perceived management's attempts to exert greater leverage over work effort as a multifaceted threat which materialised in a number of different ways. Many complained of a gradual but inexorable tightening of production targets and the unchallenged use of traditional work study methods to re-time jobs and remove 'excess' operators from the line. Others spoke of management's attempts to mobilise the disciplinary pressure of competition from harder working colleagues to extract greater work effort; and for many workers, perpetual management surveillance could sometimes effect a compulsion to relinquish informal breaks and to persevere on the line, as the following comment from one operator exemplifies:

> I've been working here for 17 years and for the last few years I just haven't enjoyed life at all. It all boils down to the attitude of management. These days I come to work and I feel like I'm in a concentration camp. I tell you, I dread coming in on nights, you're on your feet all the time and you get knackered, there's a real need for regular breaks. But we don't get them

anymore. The management just treat you like kids, they keep looking at you, checking up on you all the time.

On a general level, there was nothing particularly distinctive about these personal accounts of work intensification. Within the context of social controls over the length of the working week they typically embody a process that is inherent to capitalist production. As Marx (1976) observed, 'capital's tendency, as soon as a prolongation of the hours of labour is once and for all forbidden, is to compensate for this by systematically raising the intensity of labour, and converting every improvement in machinery into a more perfect means of soaking up labour power' (p.542). However, the contradiction alluded to above, between the constraints of CarPress's inefficient technological organization of production and the flexibility necessitated by the piecemeal development of lean production, resulted in the employment of new labour intensifying methods which corresponded to the tightly supervised, highly disciplined bell to bell practices described in Chapter Two. If the CarPress management was either incapable or unwilling to modernise the plant's capital assets then it insisted that labour should take up the slack instead.

This was not necessarily a question of vindictiveness. At least not for some managers. Under circumstances which were partly of its own making, management exhausted all other options; it had no alternative but to squeeze labour. Many middle managers complained of an absence of modern production planning instruments and indeed, a lack of corporate commitment to long term planning for the site. For example, at the time of the research, the company was investing over £1 million on a new computer

integrated information system but this could only be used for financial control purposes rather than production planning. And these financial controls inevitably militated against the emergence of coherent production policies. One Assembly Shop superintendent remarked bitterly on this:

> My main problem is the financial restrictions on the budgets needed to keep the equipment running. It's like a noose continually tightening around your neck.
>
> The responsibility lies with senior management. They're obsessed with the idea that if you meet your budgets then you'll satisfy your customer. But this is crap. Because whatever we do here we seem to get ourselves into bad situations, logjams, all sorts. And we don't seem to understand how to get out of them. That's because there's insufficient production planning. There's never any detailed production planning from the top and there's never any long term production planning either.

Faced with reducing material buffers and machine downtime problems, many UK managers would be expected to rely on the safety valve of human buffers, usually in the form of overtime. But at CarPress, the rule of the customer had reduced this option[2]. As the Chief Production Manager expressed it:

> Our new concerns about productivity are now about complying with customer schedules and meeting strict budgets. The main rule now is that we must produce 'x' units of parts for the customer in 'x' period of time. Therefore, the pressure is on continually to perform to budget levels. Because of this, overtime has become the last option for us. It's a major cost. So all alternative avenues must be explored before we resort to it. We have to continually look at the question of more efficient labour utilisation, labour redeployment, more flexibility, and so on.

[2] The problems of machine reliability and poor set-up times ensured that budgetary cost constraints against overtime working did not extend to CarPress's craft workers and white collar engineers both of whom worked considerable amounts of extra hours. See Chapter Eight.

So the situation on the shop-floor was this. Most materials were delivered to the plant just in time for production; in-production buffers were subject to systematic reduction; and corporate parsimony on capital investment in combination with ineffective production planning were producing unfavourable capital utilisation rates. Accordingly, in the light of the customer's multi-requirement for a more flexible supply system, increased output and reduced costs, the only remaining option was to run the serviceable machines flat out and to squeeze 60 minutes of productive work from every worker in every hour. As one manager said, 'we had nowhere else to go. With no stores and not enough machines up and running we could not switch to alternatives. All we could do was put pressure on the supervision to crack the whip on the men, crack the whip on idle time'.

This attack on idle time was two pronged. Firstly, in the autumn of 1994, management sought to dismantle a payment by results bonus scheme which it had insisted on introducing at the time of the acquisition of the plant from Rover but which eventually came to bestow significant levels of individual operator control over working time. Secondly, it sought to introduce a more disciplined continuous production system through tightly supervised, measured day, bell to bell working. Both of these processes will now be considered in more detail.

Payment By Results

In general, the principal difference between piece-rate bonus systems and flat-rate systems such as measured day work is that, 'in a piece-rate factory the workers are disciplined by the rate. In a time-rate factory, where men are paid by the hour or week

at the same rate, no matter how much work is produced, work discipline has to be established through organization' (Nichols and Beynon 1977, p.133). However, this statement disguises important qualitative differences in the degree of discipline, the degree of control, that can be exerted over the labour process. For example, although Burawoy's (1979) detailed analysis of the process of workers 'making out' in a piece-rate engineering factory in the USA makes the central point that such activities can be useful to capital in that they contribute to a process of simultaneously obscuring the creation of surplus value and securing worker consent, it also highlights the different ways in which workers exploit their tacit skills to maintain a degree of individual control over their work. As a result, 'workers control their own machines instead of being controlled by them, and this enhances their autonomy. They put their machine into motion single handedly, and this creates the appearance that they can, as individuals, transform nature into useful commodities. The system of reward is based on individual rather than collective effort' (1979, p.81).

In fact, pure piece-rate systems are now a rarity in manufacturing industry. Instead, many factories operate payment by results (PBR) systems where, typically, basic wages are topped up by individual payments made on the basis of time allowed/time taken to produce a job (Conboy 1976). Measured day work (MDW) systems differ from this in that output and productivity are determined wholly by management organization rather than worker incentives. With MDW, it is the prerogative of management to specify the level of daily plant performance required and to supervise work measurement, the monitoring of performance and shop-floor order to ensure that this specified level of performance is achieved. Such systems are indispensable to

highly disciplined, low buffer, continuous production regimes; they demand controlled worker flexibility rather than autonomy and strict management supervision rather than collusion with workers over practices such as 'making out'.

In the early years of the British auto industry, piecework functioned as a system of control exactly as Nichols and Beynon describe it. Workers were rated for each individual operation performed and if they produced their parts they were paid; if cars could not be sold and the track was stopped then they would be laid off. It was a form of casual labour that served management's interests well (Thornett 1987). However, during the 1960s and 70s, a period when organised labour in the industry steadily grew in confidence and militancy, piece-work systems increasingly became subject to both individual and union negotiation. As Brown (1973) observed, ratefixers were forced to haggle over piece rates rather than impose them, whilst the piecemeal growth of custom and practice, such as the periodic re-observation of work whenever the operator found the going tough, acted to mitigate the degree of management control exerted. Thus, with the balance of forces between capital and labour in this period sometimes favouring the latter, the tendency of piecework was to drift in the direction of 'managerial indulgence' as managers became obsessed with getting work out the door and avoiding strikes.

Inevitably, management launched a counter-offensive in due course. Their attempts to effect a transition from piecework to MDW became one of the major causes of strikes in the vehicle assembly industry during the 1970s, particularly at British Leyland and Chrysler (Friedman 1977). The BL management embarked on a long drawn out

campaign to implement MDW at the end of the 1960s. By 1971, after many sessions of troubled negotiations interrupted by periodic walkouts and strikes, agreements were signed for its introduction at all of BL's Pressed Steel plants, including what was to become the CarPress factory in South Wales. However, the strength of the BL unions at this time ensured that even though piecework was lost, the work rates governed by the new MDW systems were still subject to union negotiation and varying degrees of mutuality (Thornett 1987).

This is an important point to note in the context of the CarPress acquisition of the Rover plant. At the company's other UK factories, unions were at best suffered rather than treated as equal negotiating partners; the principal personnel policy objective was to marginalise effective trade union organization. The management's more unitary style of industrial relations ensured that the weakly organised CarPress workforces in the South East were unable to take full advantage of incentive bonus systems in the ways described above; indeed, at these plants, payment by results continued to deliver significant levels of management control over work rates. The inherited MDW system in South Wales was perceived as a conspicuous threat to this control. With Rover, workers were expected to reach individual production targets commensurate with required plant performance but strong trade union organization ensured that management only rarely took disciplinary action against individuals who failed to perform satisfactorily. Moreover, although, writers such as Marsden et al. (1985) point out that the more macho Rover management of the 1980s partially succeeded in untying the hands of the company's industrial engineers, in fact the process of setting

production targets was still subject to significant trade union influence. One CarPress industrial engineer recalled:

> Under the Rover management the rule was that the steward could always be present to stand with his member, to safeguard the union member against the possibility of the time study setting too high a standard. And of course the emotive thing was always the performance assessment. We used to get some really serious arguments over this. Mark, my mate on the next desk, used to get dreadful problems, he literally couldn't move around the factory without a steward tailing him all the time. It used to frighten him to walk into the assembly shop. He virtually needed a day pass to get into the place!

Mark, a staff union representative himself, had no hesitation in endorsing CarPress's drive to restore managerial prerogative on the shop-floor:

> It didn't matter what I was doing, setting up equipment, setting a standard, doing a study, it made no difference. They would always stand behind me, watching me. But when the CarPress management came they knocked all of that on the head. The management saw shop stewards standing around, not producing, and watching me sweat, watching me do all of the work. So now the union influence has declined, they certainly don't exert any control over me any more. As far as I'm concerned their days are over, and good riddance.

To accomplish this, at the beginning of 1990 the new CarPress management decided, against the grain, to jettison MDW and introduce its own trusted payment by results scheme based on targets set solely by management. Rather than countenance the endurance of Rover's system of partial mutuality, the company was prepared to concede to its South Wales workforce the limited degree of control that accompanies any individual PBR system but without allowing shop stewards any influence over the work measurement and target setting process. Now the hands of the industrial engineers really were untied and an explicit process of work intensification ensued as

the production standards established under the outgoing Rover management were systematically discarded in favour of more challenging targets.

The engineers under both Rover and CarPress managements assessed effort expenditure at 100 per cent BSI[3]. However, departing from British Standard work measurement practice, the CarPress management refused to include in their new standards what is known as 'outside work'; that is, time taken for tasks such as material handling operations, loading steel coils and so on; or even components of relaxation allowances, such as going to the toilet[4]. They were only interested in paying out bonus for pure productive labour time. Therefore, once the management secured agreement for its new bonus system, the CarPress industrial engineers set about using classic time and motion work study techniques in the process of establishing new, tougher standards for new jobs. The lack of an effective shop steward challenge enabled the engineers to mobilise their quasi-scientific methods of

[3] The BSI 0-100 rating scale is based upon the notion that a typical worker should produce x standard units of work per hour for his/her time work rate of pay and $x + y$ units of work per hour at the expected incentive performance level. Translated into a ratings scale, it is assumed that the normal performance of time workers is 75 standard units per hour and 100 standard units per hour at the expected incentive performance level. In other words, leaving aside inconvenient factors such as macho management, labour subjectivity and particular class conflicts on the shop-floor, Britain's work study engineers, working under the auspices of the British Standards Institute, decided that the normal performance of time workers was three-quarters of that of workers operating under incentive. (Source: BS3138: 1979).

The BSI 100 scale is now the standard for the engineering industry. However, other scales which equate to, and operate under the same principles as the BSI 100 scale, are also in use. CarPress used the 100/133 scale which corresponds to the BSI 75/100 scale.

[4] Basic work cycle times (used for the purposes of both incentive payment calculation and production line balancing) normally comprise three components. 'Outside work' consists of work elements which must necessarily be performed by a worker outside the machine controlled time, such as material handling; 'inside work' consists of elements which can be performed by a worker within the machine controlled time (that is, machine operation); and a relaxation allowance which includes a fatigue allowance and attention to such personal needs as going to the toilet. Machine controlled time is defined as the time taken to complete that part of the work cycle which is determined only by factors peculiar to the machine. (Source: BS3138: 1979; BS3375: 1985).

effort assessment to translate human motion into machine motion in a 'professional' quest for maximum labour utilisation. But the management was also faced with literally hundreds of existing standards which required uprating. Lacking sufficient engineers to re-time these jobs, prevailing cycle times were adjusted by a standard factor to remove unproductive labour time. On this basis, new cycle times, issue times and production standards were generated. Of course, 'outside work' was not mysteriously removed from the real labour process; material handling, the removal of scrap and pallet changes remained routine tasks. The effect was to ratchet up the effort required to reach target scores.

However, although the management succeeded in securing greater leverage over the effort exerted during productive labour time, it simultaneously forfeited a degree of control over idle time. Like many individual incentive schemes, the CarPress bonus system was designed to intensify the extraction of relative surplus value from the shop-floor workforce. If a typical job received a 'standard performance' rating of 300 parts/hour then by hitting the 133% target of 400/hour the scheme paid a premium of £1.50 per hour; hitting the 150% target of 450/hour paid £1.75 per hour; and operators reaching the 200% level of 600 parts/hour enjoyed a bonus of £2 per hour. One industrial engineer commented:

> Some of the operators would regularly go for the 200% target which was brilliant because, okay, you'd be paying out £2 for every hour achieved at this rate but at the same time you'd be getting twice as much work out of them for the price of one man!

The problem for management was that although this was certainly true for one or two shop-floor mavericks, the vast majority of production operators maintained their own informal collective discipline over target attainment. A characteristic of the bonus system was that if a job received a 'standard performance' rating of, say, 300 parts/hour, then over an 8 hour working day an operator working at the 133% incentive performance level of 400 parts/hour would complete the day's quota 2 hours early. The operator would then have the choice of accumulating bonus, taking a long break at the end of the shift (or periodic breaks during the shift), or a combination of the two. Despite the constraints imposed by the tightening of standards, the operators found that they still retained sufficient discretion and control - a simple control of speed of movement - to vary their work rates to achieve these various ends. And a collective shop-floor discipline ensured that most operators did not earn excessive bonus or finish their jobs too early, thereby exposing this control to the watchful eyes of the industrial engineers. One Press Shop superintendent expressed this as follows:

> Although there was never a ceiling, most of the operators created their own ceiling of 133. They'd go like the clappers to achieve it and then sit on their arses in the Wendy house [tea-room] playing cards or reading papers. I'd say, maybe about 10 to 15% would go for above 133, a few might even go for 150 but you'd get a shop-floor reaction.. For example, we used to have a policy of taking on a lot of temporary workers who had a tendency to go for gold. But the culture on the shop-floor was that you didn't go flat out or you'd do yourself out of a job. So the permanent operators used to lean on the temporary workers and threaten them if they didn't change their ways. And it worked of course.

Antagonism over work effort, between workers on the one hand endeavouring to create their own portions of time and supervision and industrial engineers on the other, insisting on the maximisation of working time, has been described as a

customary 'game' in capitalist mass production, involving elements of both conflict and collusion (Burawoy 1979; Jones 1994). But in an environment of lean production, this 'game' rapidly becomes dysfunctional; it transforms into a more explicit class struggle. For example, the panoply of Government and employer restrictions placed on the ability to strike induced the CarPress shop stewards and their members to implement alternative effective sanctions against the management. Almost as a matter of routine, the bonus system would be turned against the company during a 'work to rule' when the whole of the shop-floor steadfastly refused to work above the minimum 100% standard performance level. Constraints on output caused by machine downtime presented further possibilities for shop-floor resistance to managerial control. In the face of union opposition to the removal of unproductive labour from the new production standards, the management was forced to concede the payment of average bonus for any periods of inactivity that were beyond an operator's control, that is downtime. Of course, management assumed that whenever a machine became disabled the operators concerned would be immediately switched to alternative lines. In fact, the mediocre machine utilisation rates outlined above often hindered this. And the shop-floor knew this. The general resentment at the implementation of tougher targets and reduced manning was sometimes channelled towards certain disabling actions. Despite management warnings, operators would often throw teabags and other rubbish into machine oil sumps or toss coke cans into press beds. They also possessed a portfolio of other more clandestine tricks which had an immediate effect on production. One ex-shop steward explained:

> It's the easiest thing in the world to fuck up the company if you know how. I'm not saying what, but we could make certain adjustments to our machines, you know? Then the foreman

> might come up to you and ask, "Dai, how's your score, why's your machine not running?" And I'll tell him "well I'm on downtime boss, my machines broken down and I've tried but I can't find a spare fitter." In fact, they've cut down in the tool room that much that sometimes you might not get a fitter for weeks! So you'd end up getting your Nett up [target] and your bonus money while the Company's losing production!

In the context of the economic and political conditions of the 1990s, which favoured capital in so many ways, a further management counter-attack was inevitable. The withdrawal of MDW in favour of PBR during 1990 might have intensified shop-floor labour to a degree but it failed to compensate for low machine utilisation rates by increasing labour utilisation to the extent required by the evolving lean production regime. Production operators continued to forge their own versions of 'enrichment' and 'control'. As Beynon observed during his research at Ford, when given the chance workers will 'work slower; they work back the line; they share out jobs; they mess around - all to create that bit more space, that bit of room to lead "a normal life". Yet it is precisely this space, (call it autonomy or independence; call it control or humanity) which the march of capitalist expansion seeks to regulate and ultimately deny' (1984, p.389). The CarPress management became obsessed with denying their own shop-floor workforce this private space. The Personnel Manager:

> The working system we had then was like the old flat earth syndrome in that people demanded that it must never be challenged. The underlying principle was that people would not work unless they had a target, an hourly target in terms of parts, money and breaks. But my argument was that our shop-floor workers are defined as hourly paid employees which means they're paid by the hour for their labour time. And when we pay an hourly rate our expectation should be for the full 100% effort in every hour and not 45 minutes in every hour which was the attitude of most of them.

To win this objective, the management secured a new working practices agreement in the summer of 1994, following a six month dispute with the shop-floor unions (see Chapter Seven and Appendix D). The agreement assured the introduction of practices such as teamworking and kaizen; it also re-imposed measured day work coupled with the gradual implementation of strict bell to bell working, Japanese style[5].

The Restoration of Measured Day Work

Effective MDW systems require effective management. At CarPress, the demands of the customer were synchronized with available capital by traditional production planning methods; these demands were synchronized with available labour by crude coercion. The incentive bonus scheme was discarded in favour of a plant performance scheme which paid just £7.50 per week provided plant efficiency exceeded the agreed minimum of 133%. However, the management was well aware that this would not compensate for the loss of individual incentive. Consequently, the new agreement stipulated that individual target performance must still be measured and any operator falling below their previous average performance would be subject to formal discipline administered by supervision. Effectively, in a move reminiscent of Marx's description of nineteenth century factory despotism[6], the rhythm of the machine was

[5] The withdrawal of PBR in favour of MDW should not be construed merely as a process of the CarPress management catching up with its competitors. PBR systems are not anachronisms in British manufacturing industry. As Beaston (1993) has established, around 30% of workers in British industry are still covered by individual PBR arrangements; and 51% of firms in metal goods, engineering and vehicles use variations of individual incentive pay. However, Beaston also points out that since the 1970s, the number of worker covered by both collective and PBR agreements has gone into decline in favour of performance related pay, merit pay and financial participation schemes. This concerted management attack on workers' control over pay determination and associated work effort is now a general trend in British industry. In the context of the requirements of continuous lean production, it also constitutes a particular, though quite fundamental, aspect of the 'Japanization' process.

[6] K Marx (1976), Capital Volume 1, pp.548-550.

supposed to overshadow the self-control of the worker; and the self-policing of work effort surrendered to the superintendence of production.

Although some foremen displayed satisfaction at this apparent return to 'the old days' when, as one reflected, 'you used to be an overseer as opposed to a supervisor, those were the days when the bully boy was king, the bigger the mouth you had the better', many foremen, in truth, cast themselves as reluctant despots. Most were ex-shop-floor operators themselves. The new disciplinary arrangements offended their political sensibilities and resulted in an intensification of their own labour. One younger foreman, who admitted to being completely exhausted after just three years in the job, commented:

> You see, it's all about making me fully accountable for the whole performance. And to put it simply, that's to get a minimum of 133 out of every operator every day. The pressure can be unbearable. Most nights I go home, have a shower, have some tea and then just fall asleep because I'm totally knackered. The wife's always complaining that whenever I'm home I'm asleep. But even when you're awake you take work home in your head, your head's buzzing, you're writing mental notes all the time. It's just crazy! That's how I feel. When I was an operator at least I used to be able to go home and switch off. But not any more.

Another commented on the policing of work effort:

> My instructions are to push them to the limit. Just this morning my manager marched up to me and said he'd seen one of my men talking to a mate down at the other end of the plant. And he wanted to know what I'm going to do about it, why aren't I disciplining him? That's the key change in my job. It's gone from one of using the skill of talking and coaxing people to the use of pure discipline all the time.
>
> I reckon this has all been caused by the downfall of the trade unions. They've got no power any more. It's all about Maggie Thatcher. Believe me, our management used to say to us

> "well now we've got Maggie, she's doing her stuff for us, let's take advantage of it, let's kick 'em in the balls". And that's exactly what they're doing and I'm afraid I'm stuck in the middle.

Not long after the disposal of payment by results, bell to bell working was introduced. This was not bell to bell in the conventional sense of gradually eroding such traditions as washing-up time or the relaxation of work at the end of each shift. Instead, the explicit aim was to secure the highly disciplined working time arrangements established at the various Japanese transplants in the region. But rather than precipitate a major dispute over this, the management decided to take a more careful incremental approach to its introduction; bell to bell by stealth so to speak.

Normal day-workers clocked in to the factory at 7.00am and clocked out at 3.30pm for an 8 hour working day punctuated by a half hour lunch break and two ten minute tea breaks. Under the bonus system, operators were also allowed a 4 and a half minute rest each hour in addition to the longer time buffers accumulated if individual targets were exceeded. The initial objective of the company's bell to bell system was to remove these longer discretionary breaks; all supervisors were instructed to confine their operators to the line whether or not they were working.

Two months after its introduction, in the early autumn of 1994, the management announced that all informal tea breaks must cease forthwith. Although operators could still stop work each hour for an 'unofficial' rest, they were banned from taking cups of tea or from chatting together in groups. The official four and a half minute hourly relaxation time was effectively discarded. The intention at this stage was to

squeeze these little portions of time by forcing the operators into a state of ennui for which more production work was the only remedy. As the plant Operations Director put it:

> At the moment, with bell to bell continuous working we're not actually getting more parts out the door, the operators are taking longer to churn the stuff out. But we're hoping that will change. We're hoping that if they know they were capable of getting 8 hours worth of output in 5 hours with a 3 hour break then with continuous working they can now go for 9 hours output in 8 hours by going a bit faster, going like they used to do. Okay, this will be without the breaks, but we're hoping this will come about due to the boredom. It is boring work. I'm convinced that gradually under the new continuous working system they'll start to go faster.

At this stage, the attitudes of CarPress's production operators were mixed. The withdrawal of PBR was bound to give rise to divisions on the shop-floor since such systems are characterised by clear inequities in effort and pay between individuals. They also contribute to uncertainties amongst shop stewards whose principal aim is to secure collective objectives for their members, such as general pay rises (Brown 1973; Conboy 1976; Tolliday and Zeitlin 1986). The CarPress management sought to build on these divisions and pre-empt an open dispute by carefully implementing the system in stages. But this did not entirely succeed. As one ex-steward explained:

> I'm just totally against bell to bell. The old system worked. You had decent incentives there to make the bits the company wanted. You also had the incentive to earn your break. With the sort of work we are doing you need a break and you need it regular. And in any case we've been brainwashed for 30 years into accepting the idea that you have to get the job done and if things are getting behind to pull back that downtime, to speed up if need be. But what the company has done with introducing bell to bell, they've just imposed it on us, they've totally aggravated the workforce into slowing production down. We've been coerced into accepting a deal and it's been done by intimidation at the highest level.

During the few months following the introduction of the measured day bell to bell system, plant efficiency fell from the agreed minimum of 133 to 128%. In the Press Shop it fell to 125%[7]. The new system was producing unintended outcomes; a resentful shop-floor was managing to maintain a measure of discreet control. Under these circumstances, some workers displayed a degree of preference for the system's steady, consistent tempo of work over the spasmodic cycles they had become accustomed to. As one older worker admitted:

> Sometimes I actually prefer bell to bell because, in the assembly shop at least, it can be easier on the body, though I've got to admit it depends on the job. For some jobs it's much harder standing up all day under bell to bell. But the old system could be just as bad. It was giving some people heart attacks, stop go, stop go, going flat out half the time. If you pace the work that way some people are bound to have health problems. So I suppose you can't win either way can you?

However, a clear majority of operators interviewed resented the disciplines that accompanied the new system. Younger workers were more firmly opposed than their *older* colleagues. Many expressed bitterness at their loss of the right to make money or time; the loss of individual choice and control. Some had not been long out of school and were hoping to experience a more adult and equal supervisor-subordinate relationship at the workplace. They were of course disappointed. Although these younger operators were generally more likely to acquiesce to changes in working practices than older workers, they still resented the constant surveillance that comes with bell to bell working, the 24 hour vigil of production management. Some

[7] Management's counter-attack against individual workers who were blamed for this deteriorating shop-floor performance is discussed in Chapter Seven.

youngsters in one group of interviewees were recently disciplined for having the temerity of going to the toilet without permission. One of these remarked:

> I was already on 150. I'd already made up the time, the ten minutes needed to allow me to go to the toilet, so I wasn't going to lose the company any production was I? So I nipped off to the toilet at 7.50 and came back at 7.52 and as a result I got a final warning. So did 20 of my mates that day. We were all totally cheesed off...they treat us like school kids all the time. They're just bastards.

For different reasons, many women workers opposed the changes. As we shall see in Chapter Eight, the relatively few women employed on the CarPress shop-floor were offered little in the way of assistance from management to compensate for their relative lack of height and strength that are prerequisites for some press and assembly operations. Consequently, the regime of steady, continuous working merely exacerbated the levels of toil and drudgery experienced. One woman in the Press Shop complained:

> I've got to admit that on the big presses I really hate it. I mean, it's hard work and you do have a need for regular breaks, you need to sit down and take a rest. But with bell to bell you're on your feet all the time. And on nights it's worse. We all dread nights. You're on your feet for even longer, for 8 and 1/2 hours a shift.

And another:

> I just don't like it at all. Before bell to bell individual operators had some control at least. We could do the job at our own pace, within reason. We could do the scores, take breaks when we needed them and wind down at the end of the day when you do need a rest.
>
> You really need that period to unwind. The work in this place will always be hard and monotonous but at least when you worked at some speed you felt better. It might sound

> strange but you just felt better in mind and body. Your body felt better and your mind felt happier because by working fast you could give yourself something to aim for. You knew if you kept it up and completed your score you'd earn your break. But now with bell to bell it's slower but also harder and even more monotonous.

When the management consultants and business writers enthuse over the ideas of Japanese management pioneers Ohno, Shingo and the like, we must remember that they are articulating a management ideology, a particular class interest, rather than an objective appraisal of the implications of technical efficiency in capitalist production. Ohno wrote that, 'manpower reduction means raising the ratio of value-added work. The ideal is to have 100 percent value-added work. This has been my greatest concern while developing the Toyota production system' (1988, p.58). It has also been the concern of the workers of CarPress. But they have different class interests. For most, the reduction of 'human waste' and 'idle time' amounted to growing fatigue; working without breaks; working under constant surveillance; seeking permission from the boss to go to the toilet; 'being treated like school kids all the time'; and 'being married to your machine'. And they were trying to fight back because they knew the intensifying pressures could only increase. One Assembly Shop operator said:

> We all know it's not going to be like it is now forever because the company is not going to be interested in the steady pace of the Japanese. They'll be wanting us to go flat out all the time. That's the bottom line. They want you to work at the rate that you used to do when you were chasing your target but instead of doing it from 7.00 until 1.00 and then taking a breather you'll be doing it all day, going flat out from 7.00 to 3.30. That's the management's bottom line.

In November 1994, a month after this particular interview, the Company again turned the screw. It announced that all informal breaks and unofficial rests on the line must stop. Operators not working at their machines any time between official breaks would be subject to the disciplinary procedure. Operators not reaching the individual performance levels achieved under the old incentive system would also be disciplined. An authentic Japanese bell to bell system had been constructed, piece by piece.

This chapter has focused upon one significant feature of the trend towards labour intensification in British manufacturing industry today. That is, management's drive to eliminate idle time, to maximise labour utilisation, and to reduce individual worker control over the pace and rhythm of work by the introduction of more disciplined production control systems.

Elger (1990a) notes that the distinctive political economy of the 1980s and 90s has provided a definite impetus to the exercise of managerial prerogative, one result of which has led to intensifying pressures on the shop-floor. However, as this chapter shows, despite this supportive environment, the process of change is not unidirectional or trouble-free. Although, as we shall see in Chapter Seven, some CarPress managers were clearly keen to take full advantage of the anti-union conditions established by successive Conservative governments, most senior manufacturing personnel were reluctant to take the initiative for this reason alone; they found themselves forced into the position of confronting labour over idle time by

the general pressures of intense global competition in the auto industry and the particular cost-cutting interventions of the major vehicle assemblers.

For the workers at the receiving end of these changes, increased effort in the harsher, more disciplined manufacturing environment of the 1990s is not just about speed-up, or meeting tougher targets, or de-manning, or labour flexibility, important as these pressures still are. The attack on idle time is an attack on workers' own time; an attempt to undermine the ways in which workers' tacit skills are put to use to create a breathing space, a few moments to take your mind off the job, an opportunity to become temporarily divorced from the machine. It is a working class form of 'empowerment' and 'enrichment' that does not sit happily with the fashionable sermons of the business school writers and management consultants. As such, it is an empowerment that workers will seek to defend. For this reason more than any other, managerial attempts to exert greater leverage over work effort in the 1990s remain subject to contradictions, tensions and explicit shop-floor resistance.

CHAPTER SIX

TEAMWORK AND KAIZEN:

THE DISEMPOWERMENT OF LABOUR

Japanese managements do not deploy labour flexibility innovations in order to surrender control of the labour process to teams of multiskilled, 'committed', 'responsible' workers. Low waste, intensive, lean mass production requires, if anything, more scrupulous and intense forms of management control than the traditional 'Fordist' ideal type. As the survey of Japanese manufacturing transplants in South Wales indicated, in contrast to the empowering rhetoric of labour flexibility and involvement, for reasons of efficiency, lean production operates on the basis of narrow, controlled flexibility coupled with only limited worker participation in continuous improvement of the production process.

Although teamworking and continuous improvement represent additional, sometimes more subtle mechanisms for securing managerial leverage over labour power than the coercive methods described in the previous chapter, they can still constitute forms of direct control. And as Lichtenstein (1988) argues, looked at in the context of the development of mass production this century, these latest innovations bear remarkable similarities to past attempts by capital to undermine workers' collectivistic visions of a fair and decent shop-floor order. By attacking workers' lines of defence such as job

demarcations, job classifications and seniority rights, contemporary labour flexibility strategies seek to return workers to the days of full managerial prerogative, when labour utilization was unhindered by union organization and when foremen had an unimpeded right to allocate labour to the different shop-floor tasks.

This chapter provides a descriptive analysis of the CarPress management's attempts to effect a more efficient extraction of surplus value by expanding the process of functional flexibility in production. It will consider the principal objectives of managerial strategy here along with its impact on the workforce. Although the analysis focuses upon the shop-floor as the epicentre of the process of change, it will also consider the ways in which the white collar technical workforce colluded with management in order to secure sectional interests and in so doing, contributed to an increase in management's control and leverage over work effort on the factory floor.

LABOUR FLEXIBILITY AND 'OWNERSHIP'

The new working practices agreement came into effect during the the summer of 1994[1]. Although multifaceted in approach, it embodied the company's foremost objective of securing the workforce's commitment to the principle of 'total customer satisfaction' by ensuring that, 'outdated industrial relations practices that restrict or

[1] The implementation of the agreement was accompanied by hostile shop-floor opposition. This is described in Chapter Seven.

threaten the interruption of customer supplies will be eliminated'[2]. Teamworking was considered the primary institutional means of achieving this.

As we shall see, a minority of the shop-floor operators had been working in teams since 1992. The new agreement stipulated an immediate plant-wide introduction of both teamworking and kaizen (continuous improvement) together with the simplification of job classifications and the gradual implementation of various harmonisation and single status conditions. All employees were expected to perform any job or function for which they possessed the relevant skills whilst traditions such as seniority-based labour deployment were prohibited.

Although the organizational principles enshrined in the agreement constituted a radical departure from existing practice for most areas of the shop-floor, the theory, if not the application, of these Japanese flexibility techniques was not completely new to the CarPress workforce. As Marsden et al. (1985) document, during the 1980s many senior managements in the British automobile industry attempted, often unsuccessfully, to attack union protected job demarcations by seeking the introduction of teamworking and other new labour utilisation techniques. The Rover Group placed itself at the forefront of these management initiatives; but despite winning agreement for the introduction of teamworking on its main production lines and cross-trade skill flexibility in plant maintenance areas, rank and file trade union opposition combined with middle management cynicism to ensure a distinctly limited degree of labour flexibility in practice (Marsden et al. 1985; Willman and Winch 1985).

[2] 'The Way Forward', Team Working and Continuous Improvement Policy Agreement, CarPress Ltd, 1994.

Biding its time, Rover eventually took advantage of a malleable labour organization demoralised by mass sackings in the industry when it introduced authentic teamworking and controlled labour flexibility on a systematic multi-plant basis towards the end of 1992 ('A Cowley Worker' 1993). Following this, Rover's actively interventionist stance towards its first tier suppliers provided an important impetus to the introduction of the new working practices agreement at CarPress. However, the close assembler-supplier relationship was not the only influencing factor here. As the previous chapter demonstrated, lean production measures such as minimal material stores and low in-production buffers combined with poor capital utilisation rates to compel the new CarPress management to maximise labour utilisation rates. The way in which continuous bell to bell production subordinated workers both to their machines and their supervisors represented one major aspect of this. But it was not the sole one. CarPress also sought a more flexible and efficient consumption of labour power; not only did it require complete control over the time workers spent on the job, it also demanded full managerial prerogative over the allocation of workers to their different machines and tasks.

The management confronted two major obstacles here. Firstly, job demarcations on the basis of seniority. Secondly, job demarcations on the basis of craft. Both of these will now be briefly considered.

Seniority - the 'ownership' of jobs

Workers' seniority rights are most commonly associated with post-war labour deployment practices in the American steel, automobile and electrical manufacturing industries. During the 1950s and 60s, unions in these industries succeeded in securing complex plant seniority systems based on the principle of offering first choice to longer serving workers on questions of selection for lay-off, promotion and both intra-departmental and intra-plant mobility (Lichtenstein 1988; Stone 1974; Tolliday and Zeitlin 1986). Ironically, before the war, some of the major American corporations sowed the seeds for this by creating their own job classification and seniority procedures with the intention of building a sense of company loyalty and commitment amongst their workforces. But these early systems did not infringe upon managerial prerogative to any great extent. They operated within the context of close supervision and strict discipline. Foremen still had the final say when it came to selection for lay-off and redeployment; 'troublemakers' and 'militants' were always excluded from the benefits of this form of company paternalism (Lichtenstein 1988; Tolliday and Zeitlin 1986).

This management control was gradually limited during the 1950s and 60s as trade union organization started to flex its muscles. In the auto industry, a series of union campaigns and labour disputes succeeded in enshrining seniority-based labour deployment in mutually agreed constitutional arrangements. These placed significant constraints on the foreman's ability to frustrate workers' job choices through arbitrary discharge in relation to either selection for redundancy or job allocation. And by the 1980s, seniority constituted a major obstacle in the path of management's quest for

labour flexibility and more extensive shop-floor discipline (Tolliday and Zeitlin 1986).

In the British auto industry, prior to recent corporate attempts to restore managerial prerogatives, the principle of fair labour deployment was protected by custom and practice and the strength of shop steward organization rather than bureaucratic regulation. This resulted in a system which was thin on specific shop-floor rules and regulations but which instead relied upon the defence of a set of rights residing in the 'collective memory' of different groups of shop-floor workers and their elected stewards (Jurgens et al. 1993). But the effect was similar to the American experience in the sense that British car workers were led to expect an equitable and morally acceptable shop-floor order. For example, at CarPress the normative principles of seniority and ownership of preferred jobs and machines formed a central part of the 'collective memory' of the more experienced shop-floor workers. An assembly shop steward reflected on this:

> This seniority was always a sacred cow especially for the older operators here and it was one of the main reasons that we fought hard against signing the new agreement. You've got to understand that it's wrong that an older man aged say, between 55 and 60, could be asked to move from the Assembly Shop to the Press Shop where the work is heavier and more stressful. You could have someone suffering from angina and those presses would just kill him. Over the years the scores have become harder and anyone with any common-sense could see that the Press Shop scores are just too hard for the older men.
>
> I'm not saying that we never allowed some form of labour mobility mind. We used our common sense. We would often agree to labour redeployment but not always the way management wanted it. You see, before the new agreement was signed you might be a senior operator working on a decent job and churning out the parts, earning your bonus and at the same time helping the company meet it's production targets. That's fair. You'd have earned

> that position. Then along would come someone like Les Williams [Production Manager] who'd try and do a double shuffle. He'd say we've got a new job that's needed urgently and so he might try and move the senior operator onto the new job and get him to sort out all the problems and lose his bonus into the bargain while the younger operator would end up with the easier job. Well, we used to be able to stop that sort of practice. We used to be able to stand up to management and say, "hey, fuck off! That's not mobility of labour that's just an abuse of labour!".

Therefore, from the older worker's standpoint, the claim to seniority at CarPress amounted to the avoidance of disadvantage rather than an assertion of positive rights. This principle influenced three areas of labour allocation: plant seniority governed selection for redundancy, in effect, 'last in first out'; departmental seniority governed the movement of labour between the assembly and press shops; and the more serious restraint on flexibility considered here, line seniority, governed the movement of workers between different production lines and machines.

Line seniority was less common in the press shop where machine breakdowns and lengthy set-up times warranted continual movements of groups of operators across machines. In any case, disparities between the different jobs, press machines and targets were slender. Work in an assembly shop is another matter. Some jobs are clearly harder than others; the 'science' of time and motion work study rarely takes full account of every machine idiosyncrasy or every manual difficulty associated with the more complex assembly operations. As a result, the assembly shop stewards would invariably invoke seniority rights to protect their members against the whim and prejudice of production management. This tradition bred a sense of 'ownership' amongst the older operators. Not the iniquitous form which the new management ideologies like to emphasise, conjured up to achieve individual accountability for

performance, but a more benign 'ownership', a means of securing a degree of personal control over the quality and pace of work on the factory floor. It constituted a serious handicap for the management's demand for more efficient and flexible labour utilisation practices. As the chief production manager remarked:

> In the assembly shop you've got rows of fixed machines but you've also got the men fixed to the same machines. The challenge here is to overcome the rigid mentalities in this area where the men tend to regard the machines as their own, they really think they own the machine as it were. Now, thank heavens, the new agreement counters all this rigidity. Now, if you've been trained to do a job and you're capable of doing it, then no matter who you are, you will do it, no argument.

Prior to the new agreement then, the foreman's options for labour deployment, particularly in the assembly shop, were shaped primarily by the operator's length of service. Consequently, in similar ways to Burawoy's (1979) description of the seniority-based 'bumping' system in the USA, the more experienced CarPress workers enjoyed enhanced job security and control over their work. According to one manager, 'the logic here used to be that the older men always tended to gravitate towards the easiest jobs whilst younger operators were shunted towards the jobs with the harder targets'. It was a system of shop-floor control that was far from perfect; and in the context of the contemporary relaxation of collectivistic convictions, seniority will always be subject to a degree of internal working class discord. For example, the second questionnaire survey (November 1995) indicated that only 15% of assembly shop operators with less than 5 years service supported it compared to 64% of the largest group, operators with over 10 years service. Yet compared to the despotism of the foreman's prerogative, this system of ownership is at least

transparent and equitable in the long term. And as we shall see in Chapter Seven, the conflict between management and labour over questions of control and fair play is something over which some workers are still prepared to risk their jobs and livelihoods.

Craft demarcation - the 'ownership' of skill

During the 1980s, Rover took a leading position in the car industry's attempts to undermine traditional craft demarcations in the maintenance and tooling functions. The company sought to improve machine breakdown response times by rationalising the maintenance trades and establishing two new broad groups, mechanical and electrical, members of which would then form on-line maintenance crews (Marsden et al. 1985). Following trends elsewhere in the engineering industry, this did not result in the creation of teams of new multi-skilled craftsmen; the intention was to secure cost savings by reducing the size of the skilled workforce and ensuring that assignments were expedited by way of low skill task accretion (IDS 1994b).

The skilled workers at the Llanelli plant feared these developments, not so much because their bargaining position within external labour markets might be weakened (Hyman 1988) but more fundamentally, because the local market for their skills had all but disappeared. In such circumstances, the ownership and collective defence of tangible skills, which historically protected engineering tradesmen against the iniquities of Taylorised mass production work, came under real threat. Many skilled men foresaw a looming encounter with Hobson's choice: accept deskilling and the

degradation of work that goes with it, or face the dole. These fears were exacerbated upon the arrival of the new CarPress management.

CarPress was not satisfied with the limited degree of cross-trade flexibility secured by Rover. In 1991, the company introduced a new group working agreement which deepened the process of task accretion. Traditionally, teams of slingers, crane operators and truck drivers performed the difficult task of transporting and manoeuvring 25 ton dies around the factory floor. Although the work was not classed as skilled, it contained many potential safety risks and entailed the employment of a number of tacit skills which could only be mastered over time. The new agreement sought a reduction in downtime and a further intensification of the craft labour process by expecting the various skilled groups to take on much of this work themselves. The affected workers were forced to accept the agreement or suffer the consequence of job loss.

In fact, the changes contributed to further job insecurity. As one crane driver complained:

> Our people didn't vote for the flexibility agreement, they voted for their jobs. But as a result you can be doing any job now...just two years ago they gave the toolmakers a 10 point test. The management said that if they completed it then their jobs would be guaranteed. It was all about trying to get them to work flexibly. They asked them to do just about anything, from toolsetting to slinging, to driving, to cleaning toilets, to cleaning the boss's arse. The management said it was all done to save jobs. And has it? Has it hell! Since then half the men have lost their jobs. Flexibility is a con. It's all a con man! You just can't believe management.

The same worker expressed heartfelt bitterness at the company's hazardous devaluation of his own tacit skills:

> And now they're putting people to work with you who've got no idea of safety at all. I needed a 6 week training course to train for my job but all the toolsetters are getting is 8 hours. But 8 hours of training won't make you a crane driver. It's impossible, how can it? You can't learn to drive a car in 8 hours. So why a bloody crane, lifting 30 ton tools across the factory floor? It's a skilled job, you're working in confined spaces. And the problem is, they're asking these men to work the cranes, but they're not doing the job regularly. If you don't do it as a full time job you lose your feel for the equipment and you lose your competence.
>
> And I find it so galling to find some of these youngsters doing my job and telling me what to do, telling me. And of course I end up saving their necks. I end up shouting at them, "don't move it that way, you'll lose your arm, you won't be sticking your hand up at the bar buying your 5 pints again!" But why bother? I should just shut up and let 'em learn the hard way.

The slingers and drivers lost self-esteem; many lost their jobs [3]. And the craft workers did not gain any corresponding tacit skills of their own. This process of multi-tasking, in the absence of extra time allowances, merely intensified rather than enriched the labour process. A toolmaker made the following typical observation:

> The job itself has changed a lot in that we're now being asked to do far more than we used to. We have to clean the tools as they come in, the company used to employ separate workers to do that. We have to do all the slinging now whereas previously we'd have teams of slingers doing that. We have to do a lot more machining. We have to drive the stacker trucks ourselves to move the dies around in and out of the shops. And we're now being asked to operate the cranes. So the job's been upturned altogether but with no reward. It's not been, what do they call it, "enriching"? You're not talking about additional skills here, we're just doing other people's jobs.

[3] During the 1970s, the plant employed around 40 drivers and slingers per shift. By 1994, most shifts employed just 4 drivers.

The subsequent new working practices agreement represented a higher stage in the continuing process of undermining the skilled groups' defensive practices. The management sought further flexibility and efficiency in the consumption of labour power by introducing the expectation that all workers should accomplish any task for which they had the relevant skills and training. For production operators this meant working the different machines more intensively; for many skilled workers it meant performing virtually any job on the factory floor. The agreement replaced the plant's complex system of job demarcations and classifications with a simple four grade structure. Placed into the supposedly liberating organization of teamworking, higher graded skilled operators were expected to add the tasks of machine operation, cleaning and labouring to their routine skilled work whenever the 'needs of the business' demanded it.

Job demarcations, flexibility and seniority at CarPress were therefore governed by the traditions of shop-floor custom and practice; these in turn are a function of the prevailing balance of power between capital and labour. During the 1980s and 90s, mass unemployment, state attacks on trade unionism and a barrage of new management ideologies combined to swing this balance firmly towards capital. Exploiting these conditions, the CarPress management sought a phased eradication of worker control over labour deployment. Ironically, this reached its highest level under the guise of 'self-management' and teamworking. The processes by which this was achieved will now be looked at in detail.

TEAMWORKING

As indicated in Chapter 2, teamworking can be a nebulous concept, having various meanings and concrete forms in different manufacturing and technological settings. In the car industry, although it has not always been emulated, the Toyota team system constitutes the ideal type. At many Toyota factories, machines and labour are organised into cells to effect a redistribution and reduction of workers' motions, job cycle times, idle time and buffers. Production flows steadily and continually; labour works flexibly and more intensively (Cusumano 1985; Oliver and Wilkinson 1992). Much of the management literature emphasises the development of multiskilled labour processes as a job-enriching compensatory factor for effort intensification (for example, IDS 1992b; Kenney and Florida 1993), although a number of analyses of Japanese auto transplants in the UK and USA have suggested that this often amounts to little more than systematic job rotation around a limited range of cognate tasks (Garrahan and Stewart 1992; Kumon et al. 1994; Kawamura 1994).

Competitive market pressures, the cost cutting interventions of key customers such as Toyota, Opel and Rover and senior management's continual demand for more output from a leaner workforce, together compelled CarPress to gradually adopt similar work organizational changes.

The company's stated objectives varied, chameleon-like, in accordance with the different class interests at stake. Changes in working practices which intensify both work effort and management control of the labour process must be presented to

workers as delusions, or as Hayter puts it, as 'promises, or moral inducements, which management hopes will secure the cooperation of workers and weaken their trade unions' (1993, p.54). Accordingly, in the few years leading up to, and during, its plant-wide introduction in 1994, CarPress launched an ideological campaign in support of teamwork, envisaging the changes as entirely desirable and emphasising notions of job enrichment, employee involvement in management and a new consensus between managers and workers. The discourse was often patronisingly frivolous - reflecting the management's mistrust of its workforce - as the following company newsletter extract exemplifies:

> Listen to the roar of the crowd at a cup final. That's the roar of the people who appreciate teamwork. Individual star performances blending as a team is the key to outstanding success; that's why teamwork is coming to the CarPress Group.
>
> The team members, initially, may not feel they can produce as many parts as they did under the old system and so the target is set lower. But then after a few days, one of them makes a suggestion for better working and the target can be raised. A few days later the same thing happens again. Soon the target not only reaches the original figure but begins to gallop past it to the wonderment of all concerned. [4]

Wonderment indeed. When their views were directed towards other ears the management became more candid in their convictions. For example, although the head of personnel used the terms 'empowerment' and 'ownership' quite freely in his speeches and articles for the workforce, he accepted in private that they made little sense in the practical context of the disciplines of mass production:

[4] 'It's team spirit that makes teams work', CarPress Group News, Summer 1994.

> To be honest, how can you have empowerment when you've got a man dragging himself into work every morning, working 5 machines every day instead of the one and then going home again? All we're doing is breaking down the demarcations, giving the man a bit of job rotation but making sure we've got all the management controls in place first. I think that's the key to it, that's what we've been concentrating on over the past year, getting the controls in place.

And 'self-management'?

> It's like management pushing a boulder up a mountainside. It's hard work getting people to change but once you get to the top the boulder can quickly fall down the other side and the whole thing runs away from you. For that reason I don't accept this idea of team autonomy. There will be no question of total self management. The teams might not like it but they're going to need some controlling.

The senior managers agreed that, where technology permitted, teamworking should be operationalised in the fashion of the Toyota model to improve shop-floor efficiency, increase output and reduce manning levels. They also sought to cement recent gains on the issues of seniority and job demarcations by institutionalising the principles of labour flexibility and worker accountability within the team organization. In this sense, teamworking represents nothing less than a union-busting strategy and a means of weakening the long-standing culture of shop-floor unity. Even the more novel aspects of worker accountability should be viewed in these terms. In the absence of strong union organization, individual accountability for performance constitutes a classic disciplinary measure; but as we shall see in Chapter Seven, team accountability to the customer can have a more subversive and pernicious impact on worker solidarity. As one production superintendent enthused:

> The idea of accountability to the customer is important to us. I believe that operators would become more obligated and committed to the team by dealing with their customer on a face to

> face basis. You're not going to get the militancy, the continual working to rule and overtime bans that we've had in the past. Think about it. When the team members get on the phone and speak to the customer direct and the customer's complaining, "you can't let us down, we need these parts today", then that will start the men thinking, they'll start to get guilty about the idea of slowing production down.

CarPress also injected substantial levels of time and resources into constructing new team communications and employee involvement structures (described in Chapter Eight). The company therefore established a clear 'human resource' agenda: to simultaneously boost labour productivity and secure worker commitment by significantly reshaping the technological and ideological components of production.

Prior to the plant-wide introduction of teamworking, the shop-floor workforce divided into two discrete modes of work organization: a large majority group of operators and skilled workers organised by function along classic production lines and a much smaller group organised into different teams. For the moment we will focus on the majority group, the 'backward obstructionists' as some managers liked to call them.

In fact, these workers did not reject the notion of change at the workplace. Many had experienced the icy winds of global competition and recession, the slow but continual process of shop-floor redundancy in the fashion of 'salami slicing', and the waves of factory closures elsewhere in South Wales. In these circumstances, they had been forced to accept the management's cry that in order to survive, 'you have to change your ways, think smart as well as work hard at all times'. But they also displayed a world weary cynicism here; a distrust of management's ability or disposition to introduce the types of changes that would meet their own objectives of achieving a

measure of job security and a decent quality of life. As one senior shop steward remarked:

> Many of the men have worked at CarPress for 30 years or more, and you've always been told by management what your job is, you've been told what to do, to stick to the same job, your job's never changed. I feel it's not the men but the management that's has been backward in coming forward. Nobody here is saying that we don't accept change. It's management that's the problem, they're always saying something and doing nothing. They've been talking about change for 20 years now but nothing ever happens.

A press operator commented on his questionnaire form:

> The management always blame the workforce for not trying to make things work. When really, the workers who have "hands on" experience should have the opportunity to air their views. Over the years, the shopfloor workers have seen finances and resources wasted by management who seem hell bent on carrying out their ill thought out ideas come what may. And when production comes to a halt through incompetence of horrendous proportions, which has happened many times, the buck is passed. The same mistakes are being made time after time, year after year. Surely somebody can see this happening?

A similar degree of scepticism characterised attitudes to the introduction of teamworking. These also reflected a clear perception and defence of fundamental workers' interests. Some of the replies to the first questionnaire survey (October 1994) provide an indication of this; they are summarised in Tables 6.1, 6.2 and 6.3. The different responses of the Honda, Opel and Toyota teamworkers will be commented upon later but for the moment it is the general response that concerns us.

Table 6.1 Shop-floor workers' attitude to the introduction of teamworking in principle
(Percentage by row; N = 319)

	Support (%)	Opposed (%)	Undecided (%)
All shop-floor workers	38	26	36
Non-team operators	32	39	29
Honda/Opel/Toyota teamworkers	78	9	13
Skilled workers	39	21	38

Table 6.2 Shop-floor workers' attitudes to teamworking and job security at CarPress
(Percentage by row; N = 319)

	Teamworking will lead to redundancies (%)	Teamworking will have no effect (%)	Teamworking will help to create jobs (%)
All shop-floor workers	59	29	12
Non-team operators	59	31	10
Honda/Opel/Toyota operators	23	42	35
Skilled workers	68	22	10

Table 6.3 Shop-floor workers' assessment of CarPress's motives for introducing teamworking
(Percentage by row; N = 319)

	AGREE (%)	DISAGREE (%)	UNDECIDED (%)
Increasing job satisfaction			
All shop-floor workers	15	62	23
Non-team operators	12	63	26
Honda/Opel/Toyota operators	48	26	26
Skilled workers	11	70	19
Increasing efficiency and work effort			
All shop-floor workers	63	18	19
Non-team operators	61	19	20
Honda/Opel/Toyota operators	67	9	24
Skilled workers	71	14	16

The proposition that no worker would suffer compulsory redundancy as a result of the changes formed an intrinsic element of the company's pro-team propaganda campaign. Indeed, the new working practices agreement provided written assurance of this. Nevertheless, the majority of workers viewed the management's mollifying statements with suspicion and disbelief, as well they might, since a fundamental

aspect of labour flexibility within team organization is the steady reduction of team manning levels through multi-tasking and 'continuous 'improvement'. For this reason, many believed that redundancies were inevitable, that, as one press operator put it, 'what it boils down to is that you'll be sending a brother down the road, if they start to ask you to do the job of 3 different people then some people will go, its obvious'. And if some operators, rightly or wrongly, regarded themselves as less vulnerable than their skilled colleagues this did not subvert the ethical basis of their shop-floor solidarity. As one female assembly shop operator expressed it:

> I will not accept teamworking. Take the toolsetting. If the foreman asks me to change the tools on my machine, then okay, I think I could do it with a bit of training. I know how to do it, I've seen it done enough times. All you're doing is lifting a tool out, lifting a new tool in, adjusting and clamping it. But when you do that you're putting another man out of work, Dai and Thomas, our toolsetters for instance. I'm just not prepared to do that. That is morally wrong.

However, as Table 6.1 suggests, the majority of the shop-floor did not oppose the general principle of teamworking. Compared to the de-humanising fragmentation of Taylorist work organization, the idea of working in co-operation with mutually supportive colleagues carries a manifest seductive appeal. And it sits particularly well with the communitarian ethos of the South Wales valleys. As one operator remarked, 'all the steel workers and miners around here used to be teamworkers. So in that sense we have no fear of it at all, we certainly don't regard it as alien'. But teamworking becomes both alien and alienating when it is placed into the context of capital accumulation in mass production. In these circumstances, many people on the shop-floor understood that despite its ostensible appeal, teamworking was unlikely to

enhance an already limited level of job satisfaction or indeed, to liberate the workforce from capitalist subordination under the guise of 'self-management'. As one operator commented:

> Personally, I'm cynical about job enrichment. The nature of this job is that it's monotonous work. At the end of the day, the management here want their production schedules out at fast speed and as far as I'm concerned more responsibility equals more monotonous jobs and more problems for shopfloor workers. I'm not interested in more responsibility. I just don't want it. All it means is pouring more and more of management's problems on to my shoulders.

And a toolsetter:

> Empowerment? How? There'll always be someone looking over your shoulder, someone watching you. There's nothing wrong with teamworking itself. It might be okay in terms of helping each other out and mucking in together. But it's when people tell you have to work in these ways that we start to get stubborn. Because the plans this management have for teamworking here don't include allowing us to be totally responsible for the job. You're joking aren't you? Somebody will always be monitoring us. They'll be monitoring our output and efficiency because at the end of the day we'll be paid on results. Somebody somewhere along the line has got to look down on you. So maybe you do need management here. But I tell you what, if I had to give this lot marks out of ten I'd only give 'em a fucking one and that's just for keeping the plant open.

The Trojan horse strategy

During 1992, CarPress secured large contracts to supply pressed assemblies to Toyota and Opel; two years later a similar deal was struck with Honda in Swindon. True to form, these new customers insisted on determining the supplier's technology and work organization.

With the help of the CarPress engineering department, a team of Toyota engineers appropriated a section of the assembly shop and reorganised space and machinery into a discrete cell. They situated different manual, semi-automatic and robotic weld-assembly units around a team leader's control room and operators' self-inspection area. The section was therefore redesigned to provide a cell of strategically placed standard weld-assembly equipment on a multi-functional, single product family basis.

In contrast, Opel's German engineers required CarPress to invest heavily in 'state of the art', dedicated robotic transfer line technology designed to manufacture 300,000 car dashboards a year. This comprised a series of discrete teams of welders using the latest weld-assembly technology to manufacture various sub-assemblies which were then placed into rotary carousels feeding a fully integrated weld, paint and seal transfer line.

In both cases, the new work arrangements, by necessity, represented cell-based technological enclaves within a greater Fordist territory of more traditional work organization. But the company's attempt to reshape shop-floor social relations and reinforce management control was not driven primarily by technological change; it intended to introduce teamworking on a plant-wide basis without any substantial extra investment and, in some areas, without any significant adaptations to existing work layout. The work organizational changes demanded by Toyota and Opel were an explicit function of capitalist social relations; they accorded exactly with the CarPress management's longer term political aims. The new technological enclaves were also political enclaves, set up in a strategic sense as centres for the wider unilateral

diffusion of new working practices and worker attitudes. And in order to effect this, the management needed to do two things. Firstly, recruit workers to the teams who displayed a commitment to company objectives and a willingness to change. Secondly, if only on a temporary basis, the team-based labour processes required refashioning so that they displayed some ostensible wider appeal.

Under normal circumstances, operators would be allocated to new work areas on the basis of seniority and availability. But the traditional approach was jettisoned for recruitment to the teams. Instead, the management sought to create greenfield conditions within a brownfield setting by establishing groups of less experienced but committed workers and then shielding them from the 'contaminating' influence of the main shop-floor. Some managers perceived the latter factor as a poisonous constraint to the change process. For example, one superintendent commented:

> I took on a new man in the press shop not so long ago who initially got on really well, he actually liked taking the initiative and he liked a bit of responsibility. But what happens? This started to cause resentment amongst his fellow operators, they ended up hounding him out of the shop. I remember him coming to me in tears. I felt very sorry for him, so much so that I had to move him into the assembly shop...So what I'm saying is, we needed to help along the new attitudes, but it had to be done in small groups. We need to keep out the influence of the trouble-makers.

The company sought volunteers off the main shop-floor and then carefully screened each individual, testing for commitment to the ethos of teamworking and positive attitudes towards the company. The chosen few were not necessarily those operators with little experience; indeed, the management were particularly keen to enlist those with a certain history of experience, as one manager enthused, 'the experienced

unemployed, the people who have a real fear of it, the ones who are therefore willing to change'. As a result, nearly 50% of the operators in the team areas were aged under 30 compared to only 18% in the main shops; and almost 60% had worked at CarPress for less than 5 years and only 25% for more than 10 years, compared to 22% and 68% respectively, elsewhere.

Having selected favourable human ingredients, the management introduced an induction programme to prepare the operators for the new working methods. Small groups of recruits were sent to a local hotel for three day cathartic attitude-shaping sessions with a team of management consultants. Some of the operators out on the main shops were appalled at this blatant attempt to weaken their collective shop-floor consciousness. One cynically remarked, 'I saw one group go in, they went in normal and came out with their brains addled. They could only see things the way the company wanted them to see them, they were just totally brainwashed'. Brainwashed maybe, but the process had a seductive appeal in the context of the low skill/no training Tayloristic environment that most operators had suffered for years. Even an experienced shop steward, who had gone through the process himself, admitted:

> They were good fun. You'd do some exercises together, like one we had was to work out how to get a giraffe from Llanelli to Scotland in a truck without using a motorway. It might all sound silly but we did build a good team spirit among our group. And you were taught team management ideas like how to organise job rotation and new tasks such as maintenance, all that type of thing. I liked the sound of it. We all did. It seemed to add a bit of interest to your job.

However, this ideological approach was not by itself sufficient to catalyse attitude changes elsewhere in the plant. People wanted more concrete evidence of job interest and enrichment under teamworking. The management provided this by taking the extraordinary step, in the context of past practice, of temporarily removing all management controls from the teams, particularly in the Toyota and Honda areas [5].

In many respects, the resulting style of work organization resembled Swedish group working more than Japanese teamworking; rather than being subject to direct control, Swedish groups enjoy sufficient autonomy to influence questions such as goal formation, performance monitoring, production methods, labour allocation and choice of group leaders (Ramsay 1992). Moreover, both Berggren (1993) and Thompson and Sederblad (1994) have emphasised the extent to which the Swedish system allows group control over work pace through the presence of buffers and the absence of supervision.

At CarPress, the teams were advised that as long as they fulfilled their customers' daily just in time supply schedules then they would be left alone. Consequently, although the basic labour process of operating assembly and weld machinery remained unchanged, the work underwent enlargement and to an extent, enrichment. Team members moved from machine to machine rather than 'owning' a single machine; they became involved with inspecting and testing their work, ordering materials and inputting information into the plant's computerised stores system; and they habitually

[5] Self-management was less advanced in the Opel teams where the complexity and cost of the automated technology necessitated a good degree of supervision from the maintenance and engineering functions.

liaised with representatives of the customer, engineers and managers at the likes of Toyota in Derby and Honda in Swindon. Although the teams had their own 'informal' team leaders they were not subject to formal supervision; the day to day part requirements of the customer maintained the discipline and intensity of work and even here the process was mitigated by the existence of human buffers in the form of relatively generous manning levels.

Taking into account the joint impact of the company's recruitment strategy, the new attitude shaping courses and the concrete attempts to enrich the team-based labour processes, it was no surprise that the attitudes of the teamworkers indicated in Tables 6.1, 6.2 and 6.3 were significantly more favourable than their colleagues elsewhere on the factory floor. Brainwashed or not, many team workers really did feel positive about their work. One commented:

> There's no doubt that my job satisfaction has improved under teamworking. Two years ago I was working outside of the cell and the work was so monotonous. I was in a rut. But now I do get a lot of job satisfaction. Before you were just a number, a number producing parts. But now, it's not just about getting bits out the door, it's about interest. We've got these new responsibilities that make the job more interesting. It's all about total ownership.

Not all displayed such animated enthusiasm but most did at least convey a clear sense of appreciation for the injection of an element of job conception into the previously Taylorised work routines. A young operator remarked:

> It gives you a bit more knowledge and more responsibility. So I reckon it's better than standing up pressing buttons all day long. You have to think a bit more, you have to be more cautious, because you're making parts and sending them straight out the door. And if they go

out wrong then there's a come back on you and the whole team. So that's the main difference. You have to think about what you're doing.

The Trojan horse is dismantled

In his overview of the complexity of changes in skill patterns in the contemporary capitalist labour process, Thompson (1989) argues that rather than taking sides in a polarised and simplistic flexibility debate between, on the one hand, those who argue that multiskilling constitutes objective skill enhancement and on the other, those who regard it merely as low skill task accretion, we should instead recognise that the new management techniques may represent something less rudimentary - a partial break, rather than a full rupture with Taylorist work organization. CarPress added a further twist to this argument: the political strategy of *temporary* upskilling aimed at strengthening management control in the longer term.

By the autumn of 1994, two years after its introduction, CarPress decided that self-management should be curtailed. It had served its purpose. The workers in the main shops had became accustomed to the presence of the teams; as we shall see in the next chapter, their fears and opposition weakened without altogether disappearing. Moreover, the management had by then secured its new working practices agreement and the idea of extending autonomy on a plant-wide basis was just unthinkable.

Therefore, different managers and engineers suddenly became interested in the performance and efficiency of their existing teams. They began asking questions that, for political reasons, were previously conveniently deferred. Although self-

management contributed to each team's fulfilment of its contractual obligations to the customer, the company forfeited control over the performance of each team member, control over the extraction of surplus value. This was the principal concern. An industrial engineer put it succinctly:

> If we did a full investigation of the Toyota cell I suspect we'd probably find that they're only working a fraction of the normal working day. So are they fully utilised? Who's to say if they are or not? They won't tell you that's for sure. And that's the problem with self-management. You've lost control.

During this period, the thorny issue of dismantling team autonomy enjoyed a clear consensus of opinion between the production and engineering functions. Many production managers and foremen deeply distrusted the operators' motives on the shop-floor. They perceived team autonomy as a recipe for shop-floor anarchy and an opportunity for workers to divest themselves of the disciplines and daily grind of mass production. Indeed, from the standpoint of the overseer, the only pressure workers ever respond to is the dull economic compulsion of wage labour. 'Workers don't need self-management, they need real motivation, management targets and the wage incentive', *was the typical cry. But of course, self-management* also threatens the self-preservation of traditional superintendence. Many production managers rightly regarded it as a manifest threat to the survival of the conventional machinery of production control and the supervisory role that accompanies this.

Similar concerns obtained in the engineering function. Smith (1991) cautions against making generalisations about the nature of white collar technical labour processes. He argues that engineers' attitudes and actions are differentially conditioned by discrete

industrial sectors, technologies and training histories, and in particular, following Cooley (1987), by the coexistence of two engineering ideologies: craftism and professional scientism[6]. Aspects of both ideologies influenced events at CarPress. Most engineers perceived themselves as 'disinterested professionals', favouring neither managers nor workers, an identity which, as Jones (1994) argues, still aligns the engineer with corporate interests. Plant 'efficiency' was regarded unquestioningly as an objective concept; it could not embody different political interests for capital and labour. Indeed, working in an environment of mass production, many CarPress engineers understood shop-floor workers in similar terms to those expressed by Smith's engineers at Cadbury's, as 'a flexible, efficient and malleable commodity' to be put to use for maximum production (1991, p.194). Consequently, they repeatedly expressed misgivings over the 'inefficiencies' that resulted from the management's lax attitudes towards labour management within the teams. The following comment from a project engineer summed this up:

> What happens of course, if you're not careful, is that the team gets isolated from the plant. And we lose complete control over what's going on within the cell. Our Toyota team was doing everything we asked of it, the men did try to manage it, but we tended to lose track of the balance between the volume of parts that the customer required and the number of operators required for the job. So you can give them too much independence. We believe in here that they still need targets and some control. Management from above I'm afraid.

[6] The craft ideology is characterised by a more co-operative, fluid relationship between engineers and shop-floor workers. Smith suggests this is a reflection of a number of factors: the historical origins of engineering as a practical craft; the wage labour condition of engineers and their common bond with other workers and differentiation from management; and the apprenticeship method of training, which supports a definition of engineering as a holistic, integrated labour process, with cooperative manual and mental components that are not easily divorced.
The more Taylorian professional-scientific ideology reflects the integration of engineers into management and support for capitalism; the professionalisation of engineers through indirect, university-based training systems; and the development of new technologies such as CAD which facilitate the Taylorian fracturing and compartmentalisation of the holistic engineering labour process. (Smith 1991, pp. 190-191).

> You see, what's been going on inside these teams is that they've been spending too much time on non-production activities whereas their time could be more productively spent. That's what we need to be moving towards in the future. Basically, it's about measuring their production time and ensuring that in the future their working time is being used for production and not much else. I think that's the efficiency of teamworking.

For 'professional-scientific' reasons, the engineers therefore supported the company's intention to reintroduce traditional management controls. But this was not the sole reason. Additional job security interests were at stake. Chapter Four described the process by which the engineering department was stripped of much of its design function. In response to this deskilling, the more experienced men sought to maintain a craft component in their new project management role by colonising shop-floor activities such as prototype 'tryout' work. In so doing, they increasingly encroached upon shop-floor territory. It is in this sense that the engineers mobilised an ideology of craftism as a defensive strategy against loss of skill and status. But, in an environment of lean mass production, craftism can be a double edged weapon. Some men spoke of the stress and overwork that such task enlargement entails. And although they were interacting with their beloved machines, it was not always on a craft basis. One tooling engineer complained:

> A lot of our time, especially overtime, is spent doing things that should be done on the shopfloor. For instance, we spend a lot of time carrying equipment about the plant, unbolting parts, fitting them elsewhere and wandering around like progress chasers. We're constantly walking around with different hats on. I'm supposed to be an engineer. But sometimes I'm an operator, sometimes I'm a supervisor. What's happening is that there's no restrictions anymore on doing some of these jobs and slowly you tend to get sucked into it, you do more and more of it. As a result, you lose more of your old technical skills.
>
> To give you an example, the other day I went to see my grandmother on my lunch hour. When she opened her front door she said to me, "good God John, have you changed jobs? I thought

you were an office worker now!" You see, I was just covered from head to toe in grease and muck off the shop-floor. As I see things, if that's flexibility then you can stick it.

Craftism, then, had its problems. But at least it provided the men with work. Self-management by shop-floor workers jeopardized these white collar jobs; it was also regarded as an impediment to productive efficiency. Elsewhere, production managers were afraid that worker autonomy would usurp their traditional supervisory role and even subvert the shop-floor work ethic. And for senior management, the idea had outlived its usefulness once the company secured its new working practices agreement. The Trojan horse had served its purpose.

Plant-wide teamworking

Therefore, in November 1994, industrial engineers entered the different team areas. Employing the usual work study techniques these 'objective', 'professional' men re-balanced the lines by establishing tighter manning levels to meet the customers' increasing daily production schedules. At the same time, the teams were placed under the overall control of production supervisors. These changes reduced the level of worker autonomy previously enjoyed.

Meanwhile, in accordance with the new agreement, team organization spread thoughout the main assembly and press shops. The managerial logic behind these changes was simple. Teamworking would institutionalise multi-tasking; it would engender a sense of worker accountability for team output; and, as we shall see in

Chapters Seven and Eight, it would secure a gradual fragmentation of shop-floor solidarity.

The teams were named units. The press shop housed 8 units organised along dedicated product lines; some of these contained nearly 50 operators. The assembly shop housed 15 units, each dedicated to a particular external customer; they contained anything between 6 and 30 operators. A typical unit comprised a group of production operators, toolsetters, technicians (including maintenance and project engineers), a fork lift truck driver (though toolsetters also performed this operation) and a quality inspector.

The management originally wanted to recruit a team leader for each unit from the shop-floor workforce, seeking enterprising individuals who displayed a strong commitment to corporate objectives. This issue proved highly contentious. In Japanese factories, team leaders are pivotal figures in the system of worker control, enjoying a pervasive power and influence over other team members and a central role in the implementation of management policy (Fucini and Fucini 1990; Kenney and Florida 1993). But what really distinguishes them from the traditional foremen is their class ambiguity; their fallacious claim to represent the joint interests of management and team members in the single 'company team'. When managerial power lies is in the hands of the foreman it is an overt and contestable power; the shop steward and the worker might not always regard the white coat as legitimate but at least they can see it. With team leaders, things are different. One shop steward commented:

> The general relationship between the operators and the foremen here is okay. I mean, yeah, they represent management but they're only doing their job aren't they? And at least we know how far we can go with them. But it's different with team leaders. How can we trust them? Take Tony in the Toyota cell [one of the old 'informal' team leaders]. Everybody's thinking, can we trust him or not? Can we talk to him or not? We're all thinking, is he with us? Is he with the bosses? Or where is he?

In the event, mounting opposition from the shop stewards and the foremen themselves forced the management to back down, temporarily at least. Instead of team leaders, each unit was supervised by a 'unit manager', acting as a 'mini-superintendent' and responsible for the maintenance and deployment of labour, machines and materials and accountable for output, defect levels and general team performance. In every case, the unit managers were selected from existing foremen.

Although the management attempted to sell teamworking to the shop-floor on the basis of positive attributes such as 'empowerment' and 'job enrichment', most workers soon discovered that this supposedly radical departure from the old ways of working merely constituted an intensification of their drudgery. In the main assembly and press shops, 81% of operators felt that teamworking either had no impact on, or even reduced, their already minimal interest in the job (second questionnaire survey, November 1995). And as Table 6.4 shows, over 60% of operators believed they were working harder compared to the previous year, a significantly high number for such a limited time frame.

The shopfloor workers' assessment of different aspects of teamworking, collected during the second questionnaire survey (November 1995), is summarised in Table 6.5.

Table 6.4 Shop-floor workers' assessment of work intensification[7]

(Percentage by row; N = 471)

	Yes (%)	No (%)	Undecided (%)
Working harder compared to one year ago			
All Operators	61	24	15
Skilled Team Operators	59	21	20
Semi-Skilled Team Operators	63	23	14
Original Team Operators	56	32	12
Team Technicians	67	17	16
Maintenance/Toolroom Operators	60	22	18

Table 6.5 Shop-floor workers' assessment of the impact of teamworking[8]

(Percentage by row; N = 471)

	Agree (%)	Disagree (%)	Undecided (%)
'Teamworking has given me new job skills'.			
Skilled Team Operators	7	86	7
Semi-Skilled Team Operators	17	60	23
Original Team Operators	34	47	19
Team Technicians	20	62	18
Maintenance/Toolroom Operators	20	53	27
'Teamworking has given me more tasks to do but no real skills'.			
Skilled Team Operators	82	7	11
Semi-Skilled Team Operators	55	20	25
Original Team Operators	46	30	24
Team Technicians	53	26	21
Maintenance/Toolroom Operators	64	16	20
'I haven't got the time to take on new tasks and responsibilities'.			
Skilled Team Operators	83	0	17
Semi-Skilled Team Operators	58	19	23
Original Team Operators	49	30	21
Team Technicians	47	15	38
Maintenance/Toolroom Operators	73	8	19
'Teamworking has made me more accountable for the work that I do'.			
Skilled Team Operators	36	39	25
Semi-Skilled Team Operators	40	32	28
Original Team Operators	61	24	15
Team Technicians	38	38	24
Maintenance/Toolroom Operators	40	38	22
'As a teamworker, I'm no longer a number, I'm now treated as a human being'.			
Skilled Team Operators	7	86	7
Semi-Skilled Team Operators	13	62	25
Original Team Operators	25	54	21
Team Technicians	9	73	18
Maintenance/Toolroom Operators	13	70	17

[7] Prior to the new agreement, machine operators were formally classified as semi-skilled workers; other non-craft groups such as truck drivers, stores assistants and labourers were classified as unskilled. The new agreement grouped all of these workers together as bottom grade process operators qualified to NVQ Level One. As this group is dominated by the machine operators, for analytic clarity, they have been defined as 'semi-skilled operators'.

[8] See Note 7.

The semi-skilled team operators were so accustomed to their low skill, degrading, Tayloristic work environment that almost *any* change in work organization might be expected to enrich the job. Yet, the majority (55%) of these operators in the new teams believed that teamworking generated low skill task enlargement rather than multiskilling and only 17% felt that teamworking conferred new skills. Furthermore, although most respondents had experienced teamworking for just a year, a good many felt the pressure of individual accountability already. This was particularly acute in the longer established Honda, Opel and Toyota team areas; and on other issues, the workers in these original teams - who were hand-picked for their positive attitudes towards their work - were moving towards the dominant view in the main shops. The more generalized indicators of initial shop-floor attitudes towards teamworking shown in Tables 6.1, 6.2 and 6.3 do not have the same precision as those provided in Table 6.5. Nevertheless, a comparison between the two sets of statistics suggests that these original teamworkers were becoming disenchanted. One shop steward in the Opel team complained:

> I thought teamworking was supposed to be about job rotation and managing your own work. You know, being your own boss. But teamworking on the Opel section is nothing like that. Okay, we swap from machine to machine but we've got no control over it. We're still controlled by the management. So that's why we're all getting confused. I'm not so sure that we're ever going to get teamworking here. It all sounds like a bit of a con to me.

Some workers were understandably confused but the management was by now transparent about the company's objective: teamworking amounted to an institutional means of permanently eradicating the traditional shop-floor controls over the

utilisation of labour. As the personnel manager stated, 'for the majority unskilled groups it's just a realisation that they have to work where their unit manager tells them to work, that no machine belongs to them anymore, that they have no birthright to certain jobs because of age, experience or whatever, that they take on new tasks such as a bit of simple machine maintenance and cleaning when requested, and that they need to develop a bit of loyalty and accountability to the team'.

The low skill groups therefore experienced effort intensification through task accretion. The skilled groups experienced something qualitatively different; effort intensification through deskilling. The new working practices agreement introduced a simplified shop-floor grading structure which established an expectation that workers should perform any task of which they were capable, from machine maintenance to machine operating to sweeping the floor. The team technicians and craft workers in the maintenance and toolroom areas were only partially affected by these changes because the plant's low capital investment record and lack of planned preventative maintenance ensured that their traditional skills were in constant demand to keep the machinery running. They tended to float from team to team, combating the more complex technical problems and machine breakdowns as they arose - not like a new breed of "supercraftsmen" (Turnbull 1986) but instead, combining their accustomed specialist mechanical or electrical work with additional rudimentary tasks in other craft disciplines. In contrast, in order to both reduce idle time and improve the flexibility of production, the toolsetters and press fitters allocated to the teams found themselves routinely assigned to machine operation and cleaning during the intervening periods between machine set-up. The result, as Table 6.5 indicates, was

deep disillusion with teamworking. Over 80% of this group indicated that their work had undergone both task accretion and deskilling; and 86% suggested resentment at the style of management of the change process.

This is most explicitly exemplified by the management's attempt to force the toolsetters to perform production work when 'the needs of the business' demanded it. And 'the needs of the business' ensured that over the years individual targets had gradually been ratcheted upwards, 300, 400, 500 pieces an hour, and with buffers and breathers simultaneously removed. Consequently, some of the older men found themselves suddenly confronting the punishing grind of 8 hours bell to bell operating work on a press machine. Many of them objected. A press shop superintendent described his method of resolving this:

> I had one fitter about a month ago who refused to operate a press when requested by his unit manager. So I said, "right let's have him in this office and sort him out". He told me that he had a health problem, that his knees swelled up if he stood up all day on the presses. I ask you, if he can crawl over the presses fitting tools then he can bloody well operate them can't he?
>
> So I said, "well that's just tough isn't it. I want you on the presses." But I agreed to get external medical advice so I sent him down to a doctor in the town. The next day he comes back with a doctor's note saying that he could operate a press but only for a maximum of 2 hours a day. Well, that was like a red rag to a bull for me. I told him we're not having that. So I got him examined internally this time, by the company doctor. He told me that he should be able to operate a press but not for the whole shift. Okay, I said, I'll accept that. So now we've got him working for 7 hours out of the 8 hour shift. Sounds tough, but that's the way you've got to fight these boys.

Textbook teamworking, according to the business schools, confers significant new skills and autonomy on an empowered workforce as well as delivering efficient

working methods to capital. It is also assumed to quintessentially embody the decline of class loyalties in industry, to reflect the supposedly joint interests of capital and labour in the new enterprise culture of 'post-industrial society'. The above analysis suggests a different picture. In the enduring environment of class struggle at the point of production on a traditional factory floor, teamworking, no matter how it is dressed up by its apologists, constitutes a straightforward and rational attempt by capital to exert greater, unfettered control over labour utilisation, and through this, an intensification of both work effort and the rate of extraction of relative surplus value. Looked at in this way, it is no wonder that in the second questionnaire survey (November 1995), two thirds of the shop-floor said that they were 'still treated as numbers rather than human beings', that 'the factory is worse than jail' as one worker typically commented. However, the 'Japanization of work effort' does not end there. At CarPress, management-controlled teamworking provided the prime levers for labour flexibility and intensification; but a further development, management-controlled kaizen, ensured that the continual refinement of the change process would only be effected on capital's terms.

KAIZEN

The growing emphasis upon the rights of the consumer in recent years has significantly affected the car industry in both ideological and concrete terms. Many companies attempted to redress the historic Fordist imbalance between quantity and quality by building quality into the production process. As Jurgens et al. have put it,

'a new customer-oriented quality policy was proclaimed. "Quality is number one!" became the new slogan; and an appeal was made to the workers: "Produce it as if you were buying it!"' (1993, p.126). Despite the resistance of the shop-floor, the pervasiveness of the new ideology resulted in incremental moves towards the integration of the indirect quality function into production; operators assumed certain responsibilities for maintaining quality, such as self-inspection. Moreover, some companies attempted to secure a deeper commitment to quality, and indeed, wider corporate goals, by introducing - often unsuccessfully - 'Japanese' practices such as quality circles and briefing groups. Rover was one such company. During the late 1980s, as part of its 'Working With Pride' campaign, it introduced a package of measures aimed at greater employee involvement in process quality and other matters (Smith 1988; Storey 1992).

At CarPress, both the workers' experiences of these developments under the Rover management and their lack of trust in the current regime had a major influence on their attitudes towards new quality programmes. Although Smith (1988) argues that Rover's zone (quality) circles eventually failed due to a combination of trade union opposition and worker apathy, the Llanelli shop stewards recalled that they also collapsed under the weight of management indifference and incompetence. Few supervisors were trained in the arts of discussion management; few details of the principles of quality circles were ever communicated to the workforce; and few production managers felt obliged to turn their attention away from moving parts out of the factory gates.

However, the shop-floor also understood that both Rover and CarPress managers had no appetite for offering them the trust that accompanies worker involvement in the management of production. In the past, some operators attempted to mobilise their own experience in suggesting improvements to work organization but they were always rebuffed, so that, as one operator said, 'the management just don't want to know. So we've given up. Nowadays, we just walk in the gate, clock in and leave our brains at the clocking station'. The fundamental class division on the shop-floor and attending fears and conflicts over status and reputation partially accounted for this. As another press operator sardonically remarked:

> We're the ones with the experience. We know what the real problems are on the shop-floor and we have the answers. But the management won't listen to us, they never do. They don't even think that we should have the knowledge. You see, they're afraid of us, they just can't handle the idea of us having some input, some control. They know nothing. It's like barrow boys trying to run a supermarket...And you know the shopfloor managers are just the same. They're afraid to ask us to sort out their problems because they know their own bosses will start to ask questions, start to ask why they hadn't sorted the problem out in the first place. These people will never come to us because they know that they'll end up getting their own arses kicked.

This comment also suggests something else. Rather than *choosing* to submit to the hegemonic control of Japanese management systems by giving up their own little 'parcels of knowledge' in the interests of the continuous improvement of management control (Garrahan and Stewart 1992), workers may instead opt to challenge its legitimacy. Partly in reaction to the boredom of Taylorisation but also out of contempt for the inaptitude of their managers - and a firm conviction that given the chance, they could do things much better themselves - they may opt for involvement in continuous improvement in the mistaken belief that it offers a route into self-

management and greater shop-floor influence. Although many CarPress workers sought extra pay for this influence and would never countenance the idea of participation in kaizen groups in their own time, over half of those questioned in the first survey (October 1994) indicated their support for continuous improvement in principle. But not on management's terms. Worker after worker commented on the lack of congruence between the objectives of the management and the shop-floor, that 'teamworking will be introduced by *them* but it will not succeed until their ideas come into line with *ours*', that, as another pointed out, 'in past years we've pulled the company out of trouble by hard work when the management said the factory was going to close but we've got together and made the job work for us, it wasn't the managers it was the workforce, we did it on our own', and that, therefore, as another wrote, 'I would be in favour of having meetings to criticise management, or of meeting regularly to discuss ways of improving management'.

Of course, this was not management's idea of kaizen at all. Firstly, the shift in the balance between quantity and quality was not so great as to counter to any extent the principle that most shop-floor workers are employed to perform productive labour for the direct creation of surplus value[9] rather than walking off the line to participate in discussion groups. The pressures of lean production militated against the idea of full worker involvement in the continuous improvement process. The Personnel Manager explained:

> I must admit, a lot of the earlier ideas we were looking at were based on the idea that everybody would be encouraged to spend time-off production on kaizen activity. But I'm

[9] K Marx (1976), Capital Vol. 1, Appendix, 'Results of the Immediate Process of Production', pp.1038-1049.

> afraid that's not reality is it? Life isn't like that. We still want involvement from the shop-floor but our 100% priority, and I stress 100%, must be making parts. Therefore, the direction we're moving in now is that the team leaders, the unit managers, will be the problem solvers and they will just involve team members in more of a consultative manner through more effective communications with the employees.

Secondly, just as the CarPress workers had no faith in the ability or intent of their managers to support shop-floor interests, the management in turn had no real belief that their workforce might begin to act in support of the employer's interests. As one industrial engineer - who had a keen interest in this conflict - triumphantly observed:

> Look, supposing kaizen awareness was high in a cell. And let's suppose you had a 3 man team and suddenly one man says, "hold on a second boss, we could do that job with 2 men if we tried it this way." That's how kaizen and improved efficiency is supposed to work isn't it? But I tell you, it will just never happen here! The attitude is, "that's my job, I do that and nobody else touches it." I've been working on continuous improvement for years, that's really what my job is about, and the operators have always viewed me as the "big bad wolf". You don't really imagine that they'll become the "big bad wolf" themselves do you? They will never take on a labour saving attitude. So they need some sort of control, it's as simple as that.

Consequently, although the new working practices agreement stipulated full employee involvement in kaizen activity, the idea was eschewed, in the short term at least, in favour of management-led kaizens. Following the practice of a good number of the Japanese transplants in the South Wales survey, and indeed, many other manufacturers in the UK (IDS 1990b) along with Japanese transplants in North America (Fucini and Fucini 1990; Milkman 1991; Rinehart et al. 1994), production and engineering management took full control of the process of re-organizing and continually improving manufacturing practices, job assignments and cycle times in the quest to eliminate waste and idle time.

The business consultants have coined a new euphemism for this management-driven process - 'reengineering'. Essentially, teams of engineers accountable to the demands of senior managers select core processes for reorganization and set about performing value-added analysis to eliminate non-productive tasks and waste; this often results in '"downsizing" and cost reduction, combined with increasingly Taylorist job designs for operating the redesigned processes' (Conti and Warner 1994, p.101).

The kaizen activity at CarPress followed similar principles. The management prioritised the organizational problems and then directed cross functional teams of engineers and production supervisors to 'brainstorm' their way towards cost-cutting solutions. In this way, top-down kaizen transferred any notions of 'ownership' from the worker to the controlling engineer. As the Engineering Director put it, 'our engineers do regard many of these cells as "their baby", they do regard themselves as owners'. So they did. And they also ensured that the ideologies of craftism and professional scientism combined to exclude their shop-floor subordinates from any aspect of the 'ownership' process. A robotics engineer:

> Kaizen is inbred into this department...On the Opel line, for instance, we hold weekly meetings between engineering and maintenance to discuss things like kit performance and efficiency levels, looking at ways to push efficiency up, 60%, 61%, 62%, and discussing improvements over the week and searching for new ideas. So this thing kaizen is not new to me. But to be honest it will always be unlikely that we'll suck the operators into the process. In my opinion, if you get these people around a table, okay they'll talk, but it won't get you anywhere, it would just be a forum for waffling. These things need to be controlled by experts who know what they're talking about.

The second questionnaire survey (November 1995) explored the impact of this approach on a group of experienced operators in the assembly shop. One section in the shop, employing around 40 operators and producing car doors for Rover, consistently fell below the plant's average efficiency levels. To resolve this, the management engaged the services of a leading industrial consultant, the Kaizen Institute of Europe. Working in conjunction with a team of CarPress engineers, which included the token involvement of just two carefully selected operators, members of the Institute executed a transformation of the old Rover production line. Different weld and assembly machines were reorganised into semi-circular cells; line-side store compounds were dismantled; non-value added process steps were reduced; full flexibility enabled manning level reductions and increases in production targets; and operators were cajoled into performing continuous self-inspection routines to cut down waste and defect levels. The reorganization decreased the superfluous expenditure of quantities of objectified labour in the form of wasted materials and low machine utilisation rates; it also maximised the consumption of labour power and the extraction of surplus value.

Table 6.6 summarises the impact of these changes on the workers concerned. Whether considering questions of work effort, skill levels, worker accountability, worker involvement or relationships with management, the statistics indicate that these 'kaizened' operators suffered more subordination and degradation than their colleagues elsewhere on the shop-floor. Two thirds of this group felt that they were working harder; three quarters confirmed that teamworking merely increased the number of tasks to be completed rather than offering new skills; and virtually all

respondents had insufficient time to complete extra tasks such as self-inspection. Ironically, in the context of the ethos of employee involvement associated with the business school versions of kaizen, over 70% of these operators also maintained that their managers would ignore worker suggestions to improve plant performance.

Table 6.6 The impact of reorganization on operators in the Kaizen area
(Percentage by row; N = 471; Kaizen operators = 35)

	Yes (%)	No (%)	Undecided (%)
Working harder compared to one year ago			
All operators	61	24	15
Operators in Kaizen area	64	18	18
'Enough time for inspecting and approving your own work?'			
All operators	14	73	13
Operators in Kaizen area	3	92	6
	Agree (%)	**Disagree (%)**	**Undecided (%)**
'Teamworking has given me new job skills'.			
All operators	19	59	22
Operators in Kaizen area	6	69	25
'Teamworking has given me more tasks to do but no real skills'.			
All operators	56	21	23
Operators in Kaizen area	75	19	6
'Teamworking has made me more accountable for the work that I do'.			
All operators	43	32	25
Operators in Kaizen area	50	28	22
'Management would take no notice of my suggestions to improve plant performance'.			
All operators	60	18	22
Operators in Kaizen area	71	20	9
'As a teamworker, I'm no longer a number, I'm now treated as a human being'.			
All operators	14	64	22
Operators in Kaizen area	3	84	13

One protagonist in the kaizen movement has argued that its philosophy is a benign way of thinking and acting that constantly improves our quality of life, to the extent that, 'the moment we start talking about kaizen, the whole issue becomes breathtakingly simple. First of all, nobody can dispute the value of improvement, since it is generic and good in its own right. It is good by definition. Whenever and wherever improvements are made in business, these improvements are eventually

going to lead to improvements in such areas as quality and productivity' (Imai 1986, p.9). The above results expose this seductive doctrine as crude managerial ideology designed to obscure the fact that 'improvements made in business' tend to be very much one-sided in nature. The 'kaizened' operators at CarPress ended up working harder, working more intensively, working without buffers and informal breaks, suffering multi-tasking rather than multi-skilling, suffering the stress of individual accountability rather than autonomy, suffering a rejection of their knowledge rather than its incorporation, and suffering virtual imprisonment in the new forms of work organization rather than liberation from the old.

From labour's standpoint then, kaizen is not so much a 'benign corporate philosophy', encouraging the improvement of quality, but a practical means of furthering the advance of capital; a pernicious instrument of efficient capital accumulation. And looked at in conjunction with lean production control, bell to bell working and teamwork, the 'Japanization' of work organization at CarPress amounts to a cruel denial of the enriching and empowering ideologies propagated by capitalist managers and their agencies. The shop-floor experienced disempowerment rather than empowerment; not just because, as Ramsay puts it, 'part of the attraction of job reform, as distinct from some other forms of participation, is that it is "soft on power", affording little or nothing in the way of concessions on business decision-making and carrying little danger of getting out of hand' (1985, p.74), but also in a more detrimental sense. Over a period of five years, distinguished by a combination of incremental and occasional radical changes to the labour process, the workforce lost a number of its collective and individual controls over day to day working time, labour

deployment and both effort and skill levels. The outcome was further worker subordination, more extensive managerial prerogatives and an inevitable intensification of the work process.

The developments in work organization and shop-floor power relations at CarPress, therefore, bear marked similarities to the working practices and levels of management control identified amongst the Japanese manufacturing transplants in South Wales. The extent to which the changes were matched by shifts in the company's personnel and industrial relations policies is considered in the following two chapters.

CHAPTER SEVEN

JAPANIZATION AND THE NEW INDUSTRIAL RELATIONS

Advocates of the 'Japanization' process claim that the introduction of lean production control, new flexible working practices and other changes to work organization have an 'enriching' and 'empowering' impact on labour. The new management techniques might represent instruments of efficient capital accumulation but they are also assumed to provide workers with new skills, new responsibilities and greater personal control over the labour process (Imai 1986; Fukuyama 1995; and Womack et al. 1992). The three previous chapters provided concrete evidence to refute this. The 'Japanization' of work organization at CarPress was a disempowering, exploitative process, designed to increase the extraction of surplus value by weakening shop-floor controls over the labour process, maximising labour utilisation and intensifying work rates. Not surprisingly, it generated widespread rejection, bitterness and resentment, a kind of 'spirit of opposition' on the shop-floor.

Although these developments demonstrate how changes in capitalist work organization continue to disadvantage workers by displacing the jobs of some and intensifying the labour of others, they also contain an opposite in the sense that, like many other forms of technological change, they offer the worker a potentially powerful industrial weapon to use against the employer (Cooley 1987). That is, in the

context of the fragile, contingent nature of lean production, the traditional weapons of collective labour organization such as the strike, the work to rule and the overtime ban, can have immediate and damaging consequences for capital. Consequently, many writers argue that the dynamic of the Japanization of work organization also requires a Japanization of the employment relationship comprising both a fundamental transformation of shop-floor attitudes and the curtailment of independent trade union activity. If, as Turnbull (1986) puts it, the managers of lean production 'require the positive application of discretion, initiative and above all *effort* on the part of the workforce if labour productivity is to be improved' (p.196) and if through new management techniques such as teamworking, 'the production system itself is to be the principal work motivator rather than the payment system' (p.199), then 'Japanising' companies may seek to eradicate those aspects of traditional British labour organization which threaten both the production of goods and the production of worker commitment.

The preceding three chapters deliberately excluded these problems by abstracting from their industrial relations setting the CarPress management's attempts to secure advantageous changes to work organization and an intensification of production. Such an approach enabled the analysis to focus on the impact of these developments on the labour processes and work attitudes of different groups of CarPress employees. This chapter places the Japanization process back into the context of institutionalised industrial relations. It addresses the ways in which the shop-floor's 'spirit of opposition' assumed concrete forms of collective resistance alongside the

management's attempts to both subvert this and fashion a more accomodating trade unionism.

The chapter also analyses this conflict in the context of the distinctive economic and political conditions of the mid-1990s. It considers the different ways in which particular manifestations of these conditions - for example, the Government's multifaceted anti-trade union laws, enduring mass unemployment, and the new power of the customer - have constrained shop-floor resistance to the 'management of change'.

MANAGERIAL INCORPORATION AND STATE CONTROL: THE BEGINNINGS OF A NEW INDUSTRIAL RELATIONS

When CarPress's Llanelli plant formed part of BL and Rover, its management-labour relations were marked by a combination of low trust and guarded mutual respect. Although the factory was not especially militant in respect of its record of official strikes, the shop-floor unions still exerted considerable control. In the post-war British car industry, the growth of trade union power, and in particular local shop steward power, was based on buoyant employment levels and a high consumer demand for cars. Shop stewards and rank and file members were able to exploit this as they became accustomed to management's obsession with *avoiding* strikes (Marsden et al. 1985). Managers were forced to make concessions on questions of fair wages, parity and 'job property rights' in return for high output, the costs of which were passed on to the consumer. Accordingly, as one CarPress convenor commented,

the real power of the unions lay in their ability to exploit their collective organizational strength by keeping the rank and file *in work* and maintaining control over their work by periodically executing the 'in-house strike', that is, the go-slow, the work to rule, the overtime ban or the brief sectional walkout.

In March 1989, the new owners of Rover, British Aerospace, sold the Llanelli plant to CarPress. The old Rover management gave way to a qualitatively different regime; the new style was more assertive, more aggressive and more congruent with Fox's (1974) ideal type of unitarist management. The concept of bargaining and negotiating with trade unions was abandoned in favour of minimal consultation. The shop-floor responded in appropriate fashion with a series of short strikes and walkouts over job security, pensions rights and union recognition[1]. Then, in February 1990, again with only minimal negotiation, the CarPress management introduced a new 'agreement' which harmonized Llanelli's basic wages and conditions with those operating at the company's other UK plants. This had the effect of reducing most basic rates and cutting back on redundancy terms, pensions payments, overtime premia and sick pay.

This distinctly 'macho' management therefore intensified the low-trust relations inherited from Rover. Attacks on union rights and working conditions generated increasing militancy. A war of attrition continued until September 1993 when CarPress recruited a new Operations Director and Personnel Manager whose single objective was to secure a radical overhaul of shop-floor working practices.

[1] 'Llanelli plant row is resolved', South Wales Evening Post, 24.2.89; 'Plant hit by series of rows', South Wales Evening Post, 5.4.89; 'Walk-out as take-over is delayed', Llanelli Star, 6.4.1989.

These two new men were guided by principles which embody the contradictions inherent in contemporary 'human resource management' theory. They regarded any challenge to their right to maintain control and order on the shop-floor as anathema, yet they were also keen to build a new ethos of shop-floor co-operation and participation with an emphasis upon joint interests between manager and worker. In other words, they envisaged an industrial relations of 'sophisticated unitarism' (Scott 1994) aimed at inhibiting rather than suppressing any dissension. From this standpoint, the social relations inherited on the CarPress shop-floor appeared to be on the point of inducing insurrection. The Personnel Manager:

> When I first arrived here I couldn't believe it. I found worker militancy, the site came under total trade union control and the managers were continually walking on shells. As far as I was concerned, the site was completely out of control. My goal was to change the culture of the place and bring in the new working practices necessary for the site to survive.
>
> But I've got to admit at first I was quite taken aback. I didn't think the things that were going on in this place really happened any more, I thought I'd walked back into the 1970s. Virtually as soon as I stepped into my office I was faced with immediate unofficial industrial action, what we call "throwing your teddies into the corner". And I knew that my first job was to force the unions to behave legally.

Even if it were possible, the new management had no intention of dismantling the plant's existing machinery of collective bargaining; instead, the objective was to ensure that the machinery worked in the company's interests. The managers were faced with an autonomous rank and file control, which, as Hyman has argued, provides the means for workers to more effectively resist the intensive exploitation of

labour which develops from the 'rationalisation' of management in modern capitalism. In these circumstances, formal bargaining and disputes procedures deliver important advantages to capital by effectively disarming and demobilising trade union members and imposing a 'peace obligation' which leaves management the prerogative of initiative (1975, p.159).

Resurrecting the 'peace obligation' required a number of initiatives aimed at different levels of the union organization. Incorporating the senior stewards came first.

Traditionally, the senior stewards maintained a distant relationship with their full time officials, a situation that reflected the enclosed 'factory consciousness' shaping social action on the CarPress shop-floor. Working with a union bureaucracy sometimes means complying with constraining rules and regulations, complying with policies on trade union law for example, that undermine rank and file control. The new managers desired a shift in attitudes here. They became agents for building a new tripartite co-operation between the company, the senior stewards and their officials. Regional officers were drawn into a regular dialogue with senior management; meetings were organised between officers and stewards to enable discussions on matters such as national agreements and legal procedures for taking industrial action; senior stewards participated in management workshops; and as a result of such activity, the officers and stewards were drawn together towards management's agenda for securing the survival of the plant.

In this way, incorporation into management accompanied incorporation into the union bureaucracy; and for a senior steward, the act of making positive contributions towards company performance and responding favourably to the manager's viewpoint involves the reshaping of more than one social relationship. Unlike his predecessors, the CarPress Personnel Manager began meeting the stewards on a daily basis, sometimes for formal negotiating sessions but more often for informal discussions and 'friendly chats'. This subtle process of soliciting for union co-operation had the effect of usurping rank and file democracy and reversing the steward's line of accountability. CarPress sought a new style of shop steward; somebody who was prepared to act as a transmission belt for management policies and who had the determination to maintain control over the rank and file. In other words, a shop steward representing something akin to business unionism. The Personnel Manager summarised the effect of this:

> We inherited a group of senior stewards who used to be a law unto themselves. They spent too much time doing what the members wanted and they ended up becoming their members' mouthpieces. They failed to carry out their responsibility of member management. But over time, they've become more committed to the management's viewpoint.
>
> Previously, the stewards used to come up to meet me in this office and it would all end up in a slanging match with a lot of shouting and hot air. They used to get a lot of flack from us and we used to get a lot of flack from them. So there would be arguments alright and then they'd go back to their members parading their victories. But nowadays there's less argument up here and much more downstairs between the stewards and their members.

'Downstairs' on the shop-floor the senior stewards did not exactly warm to these changes. Despite a series of Government measures aimed at weakening union membership densities, virtually 100% of the CarPress shop-floor belonged to a

union[2]. These 600 members annually elected 17 TGWU and 13 AEEU shop stewards to the Joint Shop Steward's Committee (JSSC) - a steward-member ratio of 1:20[3]. The JSSC then elected four convenors or senior stewards. Since the Llanelli plant opened in 1962, this local union hierarchy provided the lines of accountability and democratic rank and file control which so disturbed the new management's vision of a trouble-free industrial relations. The company's attempt to fracture it placed the four senior stewards in a difficult position. Their hearts remained close to the members but they realised they would have to make unpopular decisions if they were to stay within the law, stay within the management's agenda and fight for the survival of the plant. Three of them, Barry Edwards, Gethin Rees and Neil Rolfe discussed this with the author:

Neil:

> The members have always viewed us with some suspicion, mind. That hasn't changed. But yeah, things have got worse. We're placed in a difficult situation. The members think that we're the bastards who sit up here, doing nothing, just sat on our arses. And they think we've all been bought off. So we can't do right can we? We're wankers whatever we do.

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[2] The Government launched a legislative assault on the closed shop in the 1980, 1982, 1988 and 1990 Employment Acts. It is now illegal (Marsh 1992). The Trade Union Reform and Employment Rights Act (1993) attempts to reduce both membership densities and union finances by forcing unions to secure their members' approval for continuance of check-off payments every three years. The Government assumes that some members will stop paying because of administrative shortcomings, apathy or personal finance problems (Labour Research, August 1993b).

[3] The numbers of trade union members per union representative in British workplaces varies directly with the size of the establishment. In 1990, stewards in establishments with 500-999 employees represented, on average, 27 employees (Millward et al. 1992). The 1:20 ratio at CarPress reflects the strength of union organization at the plant.

Gethin:

> That's right. And we're now having to police our members a lot more and keep them in check with respect to the law. Many of our members still want to walk out at the drop of a hat whenever there's a problem. But you can't do that anymore and we have to tell them. I know they don't like it but we have to tell them that we're putting ourselves at risk.

Barry:

> But don't forget there's been dramatic changes around here. For a kick off the plant capacity is down from a peak of 2000 to 800 and that affects your strength. And the Government's legislation has attacked us. But we still have to try and work within it. That's just the reality of it. We have to be careful to protect the union and to protect the members' jobs as well and make sure that the union organization survives.
>
> All three of us have got kids at school. And I for one would not like to see any of them employed in some of the cowboy outfits around Llanelli where the conditions are terrible. CarPress is one of the few major employers left and if it went down it would have a disastrous effect on the town.

Protecting jobs, protecting the union and working within the system. These responsibilities have always characterised the ambiguous position of Britain's senior shop stewards: they are dependent on management, they operate against the background of managerial power and to keep their jobs manageable they have an inevitable interest in 'orderly' industrial relations (Hyman, 1975, p.168). Nevertheless, in the current context of 'Japanization', it is misleading for some authors to argue (for example, Bratton, 1992, p.217) that determined managerial attempts to incorporate shop stewards represent no real threat to their authority or to their trade union organization; as if it were the mere existence of organization that

mattered rather than its qualitative nature. The CarPress rank and file were all supportive union members but many perceived their own unions as increasingly impotent in the face of the management's introduction of new working practices aimed at increasing the rate of exploitation. In the first questionnaire survey (October 1994), 59% of the workforce indicated a belief that their unions were ineffective. Many commented on this during interviews and informal discussions. A toolmaker complained:

> The unions here just don't support us anymore, especially the AEEU. All they're doing is looking after the company's interests. They sign agreements with the company without consulting the members at all.

> You see I thought everything was supposed to be negotiated but nothing is these days. Now if the company wants changes to any of our agreements then they change it. All they do is give us 10 days notice and it's done. That's it. Full stop. The union just has no power.

And an assembly shop operator:

> The Tories have taken a lot of the rights away from your union. These days, before you can take any action the convenors we've got in the plant just put the fear of Christ into you before you take a vote. It's not their fault, they're forced into it. They have to tell us before we vote that under the law the company can sack you, the company can do this, that and the other to you. And of course it puts the fear of God into the youngsters.

Some advocates of 'Japanization' attempt to fashion benign alternatives to such disillusion by presumptuously arguing that business unionism and innovations such as 'no strike deals' are becoming popular with trade union members and employers alike because they offer a measure of job security and the prospect of stable, consensual

industrial relations (Bassett 1987; Trevor 1988). The problem here is that such arguments tend to ignore workers' accumulated experience of the stark, concrete nature of exploitation in capitalist mass production. As Hyman comments, 'strikes are, quite simply, a challenge to the autonomy of managerial control. They are the means by which labour refuses to behave merely as a commodity (1972, p.151). Accordingly, in the first CarPress questionnaire survey (October 1994), although 46% of the small groups of specially recruited young teamworkers supported the idea of 'no strike deals', only 12% of all other shop-floor workers did so; 74% opposed the idea. During discussions on these issues, different shop-floor workers articulated strong convictions that particular manifestations of this 'business unionism' represent a transparent threat to customary collective safeguards against the commodification of labour. As one worker typically put it, 'it all means that you jump on your shovel, you do what they tell you to do, and you lose your liberty'.

Nevertheless, the point was also consistently made that the whole debate is becoming academic: in the workers' own experience, the state has effectively provided British capital with a nation-wide 'no strike deal' through the cumulative obligations contained in the Government's employment and trade union reform legislation.

Of course, some writers would reject such a notion. For example, drawing primarily on different sets of quantitative data, Marsh (1992) and Edwards (1992) suggest that the impact of the legislation could be limited compared to determinants such as the business cycle, the political climate and changes in the occupational structure. Conversely, Brown and Wadhwani (1990) maintain that, although the laws governing

strike ballots force union leaderships to act more judiciously than hitherto, the widely perceived legitimacy of a positive result often strengthens the hand of organised labour. However, such arguments only consider part of the picture; in particular, their reliance on quantitative analysis obscures the qualitative impact of the changes.

Firstly, they overlook the implications for workers of the highly restrictive definition of what constitutes a legal trade dispute in the 1990s. Secondary action, solidarity action, political action and crucially, in the context of worker attempts to maintain customary local controls over their work, unofficial action, are all outlawed[4]. Moreover, the sheer complexity of balloting regulations is increasingly making the strike weapon both prohibitive in terms of costs and an impractical means of resolving the many problems that demand immediate action (Labour Research February 1993; August 1993a). Secondly, as Nichols argues, just because the laws are not used regularly - in the sense of daily appearances of trade unionists before the courts - does not mean that their impact is slight. Injunctions against some of Britain's most powerful unions and the sequestration of funds might be rare events but when they do occur they make a 'public clatter', so much so, that just the threat of using the law can have a critical psychological effect on organised labour (1990, p.45).

[4] The 1990 Employment Act seeks to prevent unofficial industrial action by forcing unions to take positive steps to bring such action to an end. In addition, the 1990 Act and as we shall see, more detailed amendments to the Trade Union and Labour Relations Act, allowed employers to selectively dismiss individual employees who participate in such action (Welch 1991; IDS Employment Law Handbook).
New definitions of a legal trade dispute established in the 1980, 1982 and 1990 Employment Acts outlaw secondary, solidarity and political action. Together these constitute the most devastating of the Conservative's legal changes. The total prohibition of solidarity action is in breach of the International Labour organization's Conventions on labour standards and is unique in the Western industrialised countries (Hendy 1991).

These factors inform us of the need to take into account the impact of the Government's anti-union legislation on social action on the shop-floor. In the case of CarPress, the legislation engendered feelings of impotence and defeatism, to the extent that many workers believed the intervention of the state had provided management with a decisive set of controls over institutionalised collective resistance. The following remarks were repeated consistently throughout the factory. A Press Shop Operator:

> I support the unions and I always will do but these days their powers are non-existent. These days we're all governed by the law aren't we? Everything must go through procedure, and even when we've managed that we can't win, the stewards just bring in the full time officials and they never do anything. All these laws, they're all on the company's side.

An Assembly Shop Operator:

> I believe every individual should have the right to strike. It's a basic right. But nowadays strikes seem to be a thing of the past. Not because they are wrong but because there are so many procedures you have to go through before you're allowed to go out. I mean with these Government laws the management just can't be touched, everything seems to be in management's favour. If you put a foot wrong they can seize all your union's assets. It just seems like taking action now is virtually impossible.

Defeatism in some quarters converted into a caustic, trenchant anger in others, an anger which would soon spill over into more 'unofficial' forms of opposition. One worker complained that, 'the management in this plant are nothing but industrial thugs. They've got the law on their side and they use it to the full'. A woman in the assembly shop was more discriminating: 'we've got no union anymore what with the

stewards being bought off and with all Thatcher's laws. There just doesn't seem to be anything we can do about it, we've got nothing left. What we've got here is not Victorian times it's bloody Thatcher times. All the management are just Thatcher clones'.

Shortly after his arrival, the CarPress board of directors considered a proposal from the personnel manager for a pendulum arbitration-type 'no strike deal'. In a mirror image of shop-floor sentiments, the board rejected it, believing that the combination of strong management and supportive employment legislation is more likely to provide the prized 'stable industrial relations' than a pendulum that can swing both ways. However, by themselves, these conditions do not completely suppress resistance, they only reshape it into alternative forms. The CarPress management soon realised that fostering a more pro-company, law abiding attitude amongst the senior stewards would be ineffectual without also addressing the plant's historical legacy of rank and file control on the shop-floor. The senior stewards represented the members during the formal collective bargaining process but the members and their local stewards exerted their own controls on the production line. It is in relation to this more informal wielding of collective power that many CarPress workers were keen to stress that, 'we are the union - not the officials or the stewards - the shop-floor is the union'.

The new Operations Director provided his own commentary on this tradition by spelling out his anticipation of an alternative trade unionism that would function more in the company's interests:

> In my view, there's nothing wrong with unions, what's wrong is the people who join them. The officials and the senior stewards work well with the company and are on our wavelength. But the normal stewards strut around as if they own the place. They're power mad.
>
> But I don't think there's a need to introduce Japanese industrial relations here. Let's face it, we are where we are - we're not a greenfield site. Ideally, I'd like to have one union and one bloke to speak to. But the problem is not the union, it's the individual members. They think it's a malingerer's charter. In saying that, people do need some organization to represent them. Many do feel insecure. Indeed, I'd rather have a decent union here than no union at all. Because you have to remember that when people sign an agreement here they're generally loyal and they'll stick to it. The agreements just need managing properly, that's what's been missing in the past.

In the winter of 1993, the company inserted into the annual wage bargaining process the package of new, labour intensifying working practices. The management was confident of dissipating senior shop steward resistance to these innovations through careful, assiduous negotiating but it recognised that it faced a serious oppositional challenge from the rank and file, chiefly from the more experienced workers. Chapter Six described the processes by which the general resistance to teamworking was partially eroded by the astute introduction of work organizational changes on a piecemeal, sectional basis. However, a change in shop-floor attitudes of a more substantial nature was needed to secure compliance with the new production regime. Drawing on the plant's historical traditions of low-trust relations and conveniently leaving aside its pretensions to 'sophisticated unitarism', the management opted to induce this change through a mobilisation of fear, and in particular, by publicly punishing a number of individual scapegoats for the shop-floor's 'spirit of opposition'.

First and foremost of these scapegoats was an assembly shop senior steward named Ieuan Thomas. Ieuan had been a TGWU representative in the plant for 23 years, culminating in 8 years as a convenor. He came to union activism out of an intense concern for the health and safety of his workmates. In the 1960s and 70s, compensation for industrial injury in manufacturing tended to be restricted to the more tangible and immediate impairments; slow developing injuries, such as those associated with continual limb movement or work on constantly vibrating machinery, often went unreported. Ieuan became increasingly disturbed about the rising incidence of recurrent debilitating limb conditions amongst his colleagues, conditions such as vibration white finger and repetitive strain injury, and he resented the cynical way in which his shop-floor managers turned a blind eye to this. He became a health and safety representative, immersed himself in the fine print of the laws and regulations governing industrial injury and compensation, and then commenced filing claims on behalf of his members. Over the years he achieved many notable successes through a combination of scrupulous research and personal representation at meetings with management and union lawyers and with doctors at medical appeal tribunals.

This was the original basis of Ieuan's union activism, a resolute attachment and sense of duty to his members and his class, a relationship that was sustained during his later role as a shop convenor. It provides the quintessence of something that Beynon (1984) refers to as a dialectical social process involving the construction of strong

mutual bonds of respect and understanding between the steward and the member. He attracted none of the cynicism recently encountered by other senior stewards in the plant, indeed, many members revered him, variously describing him as, 'a clever man, just too clever for this management, but also too good for them', 'a man you could depend upon, he would always look after your interests', and, 'a real shop steward, someone who stuck up for all the members in the plant not just his own'.

In the context of the company's attempts to insert a divide between the senior stewards and the more militant rank and file - by incorporating the former - Ieuan Thomas constituted a problem for management. He was able to mobilise principled and authentic legitimising arguments in the negotiating process which consistently opposed company interests. This was not the new 'business unionism'. Management's idea of a virtuous union activist is now any individual who is prepared to break the link of accountability between the member and the representative. In contrast, Ieuan's motives, interests and personal vocabulary fully corresponded with the rank and file's; he perfectly encapsulated the model shop steward, an individual who is able to act in spontaneous rapport with his constituents (Armstrong et al. 1981, p.36). This conflict of interests came to a head during negotiations over the new working practices.

As we saw in Chapters Five and Six, a number of elements in the company's proposals were antithetical to shop-floor interests. As well as further eroding conditions of employment such as sick pay and holiday pay, the company proposed to substitute continuous bell to bell working for payment by results, it proposed to

introduce management-led kaizens to continually improve rates of labour exploitation and it sought a deepening and widening of the labour flexibility process, primarily through teamworking. As the latter practice constituted the most significant change, the management spent all of 1993 pursuing the consent of the senior stewards through informal discussions and joint management-union workshops on the subject. This strategy proved effective for some but it had little impact on Ieuan Thomas. He understood that teamworking amounted to little more than the redistribution of additional tasks amongst fewer workers. This knowledge *erupted into angry* confrontation during a negotiating session in December 1993:

> I remember facing up to the Managing Director, head on, nose to nose. I tell you, a cigarette paper couldn't have separated us. There was this real heat being generated between us. And I remember saying to him, "I'm telling you straight, teamworking is not coming to this plant if it hurts my members. I'm not selling my members' jobs". And that's how it ended. The MD just stood up, smiled, held out his hand, shook mine and said, "it's been a pleasure doing business with you Ieuan". The next thing I knew I was given an ultimatum - stand down or be sacked.

The following day, an indignant shop-floor held a mass meeting and voted overwhelmingly for strike action. But this threat was soon incapacitated in the face of authentic management warnings of widespread dismissals, the lack of support from some other senior stewards, and crucially, Ieuan's personal reluctance to place his members' jobs in jeopardy. He therefore decided to stand down from office. Despite this, many of his sympathisers in the assembly shop maintained an unofficial overtime ban for 3 months.

Six months later, in the early summer of 1994, after a long period of intensive negotiations, the senior stewards felt confident enough to recommend a draft working practices agreement to the membership. However, both TGWU and AEEU members rejected it by four to one and attempted, section by section, to implement a plant-wide, unofficial overtime ban. The new management was incensed at this explicit rejection of its authority but it also realised that without the support of the senior stewards and the union bureaucracy the fragmentary, disorganised nature of the shop-floor's resistance rendered them easy meat. The Operations Director belligerently explained:

> They didn't have the brains to come out and have a go at the company en masse. If they'd done that we wouldn't have known what to do. But instead they came to us in groups. The maintenance group came to us saying they were refusing to work to the new contract and threatening to implement their overtime ban. So we immediately turned around and gave them a 15 minute warning to withdraw the threat or they'd be sacked. Of course they all capitulated.
>
> Then what happens? The toolroom workers came in, they came out with the same threats and so we gave them the same 15 minute warning and they capitulated. Consequently, the operators were left by themselves and they had to give up because their strategy was to leave it to the skilled groups to come out and halt the whole of production. But I'm afraid the skilled groups were stupid enough to raise themselves above the parapet and they got their heads shot off.

The company then turned the screw decisively. The Group's Managing Director spent a week at the plant 'counselling' small groups of workers and urging them to abandon their resistance; representatives of Rover threatened the shop-floor with the withdrawal of work and immediate redundancies; and finally with the explicit connivance of right wing union officials, the plant management sent to the home of every employee a written ultimatum to sign the new labour contract or face instant

dismissal. The workforce had no choice but to submit. The agreement was signed in August 1994.

The company's problems did not end there, however. Signatures placed on contracts under duress do not denote support for their contents. Workers in many areas of the plant remained bitterly resentful at the management's dictatorial and arrogant stance. This manifested itself in a variety of different forms of informal resistance: some sections maintained discrete 'go-slows' and 'work to rules'; individuals might refuse to work overtime on the basis of sudden personal or medical problems; machines would develop mysterious disabling faults; quality defects would go unreported; and so on. The management created a cycle of discontent by responding in kind with frequent threats of dismissal and the repeated use of the disciplinary procedure.

In consequence, manufacturing performance deteriorated. The plant used a 'break even' gross efficiency bench mark figure of 133% as a basic performance target. By October 1994, this figure had fallen to 128% for the first time in many years. CarPress decided to act swiftly to reverse this decline.

CarPress had expropriated Ieuan Thomas's union position yet he retained a significant influence. In his own assembly shop, many members still came to him for advice and to discuss ways of combating management's actions. He remained a kind of 'champion of the rank and file', if no longer an elected one. As well as causing continuing displeasure in management circles, Ieuan's sway and popularity on the

shop-floor generated resentment amongst some senior stewards. For example, during a Welsh Regional TGWU inquiry into the circumstances surrounding Ieuan's removal from office, held in May 1994, two of these stewards complained that his continuing participation in union affairs was resulting in their being 'hounded by the membership to secure concessions which were almost impossible'[5]. This rank and file pressure clearly constituted a problem for management yet its severance from the union hierarchy, something the management had assiduously cultivated, also provided propitious conditions for the isolation and destruction of its protagonists.

The problem of overtime provided the flashpoint to precipitate this. Beynon (1984) observed that on the assembly lines of the 1960s and 1970s, the allocation of overtime became an important aspect of the conflict of control between the shop steward and the supervisor. Put crudely, workers in general needed their extra hours for extra money to help control domestic debts; foremen also needed extra production hours but they liked to exercise control over who worked it. In many plants, this contradiction was subsequently managed through informal agreement and evolving custom and practice. However, the same conflict of control has again become acute in the 1990s. Whilst the contemporary mass culture of credit card consumerism intensifies worker debt and the general demand for overtime, the simultaneous trend towards a more immediate factory production for consumer demand places a higher premium on managerial control over the allocation of working time.

[5] Notes and Findings of the TGWU Regional Enquiry into Union/Company Relationships at CarPress Ltd, 1994.

Prior to the new agreement, overtime on the CarPress shop-floor was distributed on a rota system managed by the shop stewards. In normal circumstances, no production operator could be offered more than 'two shots' of extra working during any one week, thus ensuring general equity and protecting individuals from overwork. Management disliked this system for three reasons. Firstly, it interfered with managerial prerogatives; secondly, it prevented foremen from choosing their favoured, most productive workers; and thirdly, it frustrated the new principle of working extra time - just in time - for immediate market requirements.

Accordingly, the new working practices agreement placed overtime allocation firmly back into management's hands. And as a result of this, extra working hours became the exclusive property of both the 'blue-eyed boys' and other more reluctant workers who, against their will, were routinely requested at short notice to work on at the end of their shift.

During the last week of October 1994, the rank and file tried to put a stop to this development by implementing another unofficial overtime ban. By midweek, the management responded in turn by asking all individuals on the shop-floor to indicate in writing whether or not they were prepared to comply with their new contract of employment. In the resulting indecision and confusion, a group of 105 assembly shop operators decided to hold an impromptu shop meeting. There was nothing unusual in this. Historically, whenever the shop had a specific problem, the operators would meet together to openly discuss it. In some circumstances the company might sanction either a paid or unpaid meeting in advance but far more common was the

unofficial, spontaneous assembly where the members would finish their business in a matter of minutes and then send their senior steward to gain retrospective managerial authorisation for an unpaid meeting. By giving their tacit consent to this tradition, the shop-floor managers became assimilated into it, to the extent that they could read the minds of their operators, they always knew when a meeting was likely to be called. Things were no different on this occasion, they fully expected the operators to gather together. What was abnormal this time, however, was that the management was rather pleased to see it happen.

An amendment to the Trade Union and Labour Relations Act introduced in 1992 established that an employer wishing to dismiss an employee who is taking part in unofficial industrial action no longer has to be concerned about selective dismissals or re-engagements[6]. As Income Data Services have confirmed, 'he can select those employees he considers to be organisers of the strike or general trouble makers in order to get rid of them. Furthermore, there is nothing in the Act to prevent him from deliberately provoking unofficial industrial action in order to bring these dismissals about'. The same amendment also prevents unions from defending members dismissed in this way by removing immunity from proceedings in tort in respect of industrial action[7].

[6] Section 237, Trade Union and Labour Relations (Consolidated) Act 1992.
[7] IDS Employment Law Handbook, Series 2 No 7, 'Industrial Action'.

These changes became engrained in the minds of certain CarPress senior managers, particularly so since they also came to realise that, under the terms of the law, the shop-floor's tradition of holding short unofficial meetings constituted unofficial industrial action. The time had arrived to translate this knowledge into action.

Two minutes after the CarPress assembly shop operators assembled together, the Head of Production suddenly arrived on the scene and demanded that they go back to their machines. As they began doing so he bellowed out instructions for all 105 operators to go home under suspension. Over the following three days they were each called for interrogation before a disciplinary hearing in a local hotel. As a result of this 'kangaroo court' - as many workers described it - the management decided that the decision of some workers to exercise their traditional right of collective discussion for just two minutes constituted unofficial industrial action and 'gross misconduct'. Forty seven workers, mainly shop stewards, rank and file dissidents, women and disabled workers were dismissed; the remaining 58 were handed final warnings.

The workforce was stunned. Not surprisingly, Ieuan Thomas was one of the dismissed. A week later he told the author:

> This was a management set up - it was an entrapment. I hate to use the word but I was watching a programme on the telly last night about prostitution and the word entrapment kept being used, it hit me in the face, that's what happened with us. It was like policemen catching prostitutes by asking favours, asking for sex. The management knew the concerns of the plant, they knew our traditions and they knew people would respond with a meeting. It was all over in 2 minutes. The management set us up, they pounced and sent us home in disarray.

The Personnel Manager was interviewed during the same week. In normal circumstances, these managers of factory politics tend to act as 'dealers in ideology' (Nichols and Beynon 1977), seeking to obscure the harsh fact of capitalist exploitation by smooth talking those who have the patience to listen into believing that life in a factory is essentially harmonious and trouble-free. But on this occasion the factory had reached a state of crisis; nerves were on edge, adrenalin was flowing and the mask dropped:

> I know you outsiders think that these disputes happen by accident, that they're all the result of individuals making unfortunate mistakes. But you're wrong I'm afraid. They're often planned. We plan these battles and so do the other side. I tell you, some of the operators down there are anarchists, they believe that they are the ones to control the shop-floor. We were determined to take these groups out. I don't like talking about industrial relations as if it's a war, but this <u>is</u> a war as far as we are concerned. And this was the big one, this was the big battle, it was the final Alamein for both sides. And we had to win.
>
> This wasn't any accident. It was planned strategy, we were planning it and so were the anarchists. This factory is not a mini police state but it was absolutely essential that we got rid of the militants, the obstructionists. You cannot implement change, you can't have progress with these people around.
>
> We knew they'd go off on an unofficial dispute, and of course we knew that their union officials couldn't support them on this any more. And they're fools. If it were an official dispute we could still have sacked them but we would have been forced by law to sack the lot of them. And maybe we would have done. But the laws on unofficial action allow you to select who you want back and who you want to dismiss. And we don't have to say why! They're all fools, and they walked right into it. But I'll tell you something. It's concentrated minds down there all right. We've got the bastards working at last!

The 47 dismissals were subject to a final appeal procedure. The company appeared to prejudge this by immediately employing 60 young temporary workers, who, after a

two week period of intense coaxing and heavy-handed supervision, were proclaimed in Stakhanovite fashion as paragons of effort and high productivity. Needless to say, all 60 were shunned as 'scab labour' by the rest of the workforce. During this period, 21 appeals failed[8]. CarPress reluctantly re-employed 26 workers in order to dissipate the potential for strike action and, since a good proportion of these were women, to avoid tribunal applications for sex discrimination. However, it made sure that the remaining 21 were useful scapegoats. Ieuan Thomas headed these. They also included four shop stewards and some of the more vocal dissidents amongst the rank and file. Others were workers with an absenteeism record due to intermittent disabilities sustained by the continuous operation of heavy metal finishing machinery for most of their working lives[9].

As little as ten years ago, such an attack on the shop-floor's moral order would have been countered by immediate strike action. But this is not 1984, it is 1994. If you are a trade unionist attempting to defend yourself, 'Big Brother' really is watching you. Two days after the initial sackings, a meeting of the plant's TGWU membership voted overwhelmingly for an all-out strike if any one of the appeals failed. But the intimate collectivism of the mass meeting is qualitatively different to the loneliness of the secret ballot. The essential logic of the Government's balloting legislation is to

[8] A copy of the Notice of Disciplinary Appeal is provided in Appendix E.

[9] Many of this group were metal finishers. Different individuals suffered from vibration white finger, cervical spondylitis and carpal tunnel syndrome. These injuries were sustained by, in some cases, working for over 30 years with constantly vibrating, heavy hand tools, such as linishers, orbital sanders, 20lb mop machines and pneumatic hammers. Despite the fact that the most common prescribed industrial disease, vibration white finger, can involve painful paralysing attacks, the state rarely assesses individuals as being 14% or more disabled which qualifies them for industrial injuries benefit (Labour Research, March 1996). Of the 21 workers dismissed, 8 were metal finishers with 8-10% registered disability.

debilitate the collective power of the mass and extinguish the immediacy of workers' anger. It removes men and women from the collective security of the mass meeting and places them, after a suitable cooling off period, into individualistic insecurity, into the domestic environment of the debt-ridden consumer.

The cumulative practical ramifications of the legislation ensured that the CarPress rank and file would not get their legally sanctioned, heavily scrutinised, individualised vote for nearly 3 months. Firstly, the legal imposition of postal ballots in 1993 placed decisive time consuming state and employer controls over union organization and strategy[10]. Secondly, support from the TGWU regional officials was, in any case, lukewarm. They were well aware that the union faced possible fines and the sequestration of funds since the law no longer gave immunity against organizations supporting workers who are dismissed for taking unofficial action. Moreover, despite the protests from some groups of its rank and file, the AEEU Executive Committee decided that since none of its 200 members were sacked they could not offer any traditional solidarity action.

During the second week of December 1994, the plant's 421 TGWU members had their first secret ballot. In keeping with contemporary management's perverse notions

[10] As Labour Research (February 1993 and August 1993a) describes, the Trade Union Reform and Employment Rights Act (1993) places significant new constraints on unions: all ballots must be postal; employers must be notified twice before a ballot is held (the first being the formal notice of intention to ballot, the second being a copy of the ballot form); employers must be notified again after the ballot to give them at least 7 days notice of when the strike will take place; this notice must also inform the employer whether the union's action will be 'continuous' or 'discontinuous', thus virtually giving away all of its action strategy; unions have to appoint expensive independent scrutineers to oversee the ballot; and finally, following a later ruling from the Court of Appeal, unions now have to provide employers with the names of members being balloted.

of what counts as legitimate workplace democracy, the membership was bombarded with continual warnings of the likely loss of contracts and jobs in the event of a strike. Immediately before the vote, each member received a personal letter from the CarPress Chairman threatening the loss of Rover contracts and instant dismissals if any strike went ahead[11]. And it was Christmas. Ieuan Thomas was pessimistic:

> These laws are so clever. You'll have the members receiving their ballot forms at home, they'll have their wives and husbands looking over their shoulders, they'll have their kids bawling for Christmas presents and they've got their mortgages. And worst of all they've got fear.

Despite these intense pressures, a small majority of members voted to strike. But it counted for nothing. The state-approved scrutineers discovered that some ballot forms had been despatched to a number of retired members. The result was nullified. In a rearranged ballot in mid-January, a full 3 months after the sackings, a dispirited CarPress TGWU membership produced a tied stalemate; 83, by this time apathetic members, did not even bother to vote. Amidst anger, despair and resentment at what many activists perceived as growing evidence of collusion between union officers and management, a relieved union bureaucracy announced that the dispute was over.

[11] A copy of this letter is provided in Appendix F.

STRUCTURAL IMPEDIMENTS TO COLLECTIVE RESISTANCE

We have seen how the capitalist state can profoundly influence the processes by which employers seek advantageous shifts in the nature of contemporary employment relations. Most conspicuously, the sheer weight of Government legislation has created an ideological power sufficient to decisively reduce worker self-confidence whilst its particular concrete interventions may seriously undermine rank and file attempts to maintain a sense of moral order on the shop-floor.

However, this is not a solitary influence; anti-trade union legislation can be debilitating because it is exploited within distinctive contemporary political and economic conditions which are advantageous to capital in so many ways. These same conditions also provide the framework for an interplay of important additional factors which together may further influence the outcomes of class conflict in capital's favour. At CarPress, the most significant of these were management's manipulation of the perpetual fear of unemployment in South Wales; the political ramifications of the new customer-supplier relations; and both the political isolation of, and divisions within, the shop-floor rank and file. Starting with the latter, these factors will now be briefly considered.

Isolation and division

Virtually since the CarPress plant opened in 1962, the shop-floor's ideology of resistance derived exclusively from the practical experience of local class conflict, struggles over work rates, seniority, discipline, and so on. It constituted a classic

example of Beynon's (1984) 'factory-class consciousness', bolstered by expanding product markets and the self-assurance that comes with job security. Autonomous shop stewards ruled the roost, they felt no need to build relationships with the union bureaucracy, with external political organization, or even with shop stewards in other plants.

This sense of separateness was given a further twist by its Welshness. For example, when Llanelli senior stewards attended the old BL/Rover combine committees in the 1970s and 80s, they would sometimes communicate privately with each other in the Welsh language to prevent their English colleagues from eavesdropping on their independent strategic discussions; when they supported the miners during the 1984 strike they were essentially supporting Welsh miners; and when the new CarPress managers arrived in 1989, they were not regarded as typical agents of control but as something more alien, as 'English barrow boys', as people who, as another operator put it, 'being English have no regard for the Welsh and it's culture'. These Welsh identities were therefore built on a strong sense of difference as well as pride. As one woman commented when asked about teamworking: 'all that is putting worker against worker. The bosses don't understand that we're not like that in Wales. We're real workers, we're Welsh workers and we stand up for ourselves!'

In consequence, when its rights at work and union organization came under intense management attack in the more competitive and insecure market conditions of the 1990s, the Llanelli workforce found itself isolated; it had no established means of securing solidarity support in any decisive form from outside the factory gates.

Crucially, the Joint Shop Stewards Committee failed to build constructive links with stewards at other CarPress plants in England. Moreover, its customary rejection of close relations with the union officialdom in South Wales and beyond was only eventually reversed on management's terms, yet as Spencer (1989) argues, contemporary political and economic conditions dictate that shop-floor organization will not successfully engage in struggle without the support of official union structures, despite the political constraints involved. The corollary of this was that solidarity support was restricted to the well meaning petitions and speeches of local Labour MPs, local authority dignatories, trades councils and church leaders. But as the miners discovered in 1991, an outbreak of public moral indignation is no substitute for action[12].

Traditional Marxist analysis insists that the trend towards homogenisation of work increasingly unifies the working class, an argument that tends to minimise the resilience of intra-class divisions and the impact upon work of the wider social division of labour concerning race and gender (Thompson, 1989). Although CarPress employed no ethnic minority workers and as Chapter Eight describes, the most significant gender conflicts were those between male supervisors and female workers,

[12] The local media were particularly sympathetic to the plight of the sacked workers, as were local politicians who made a number of attempts to intervene on their behalf. For example, in December, the local Labour MP, mayors, other leaders of local councils and the Vicar of Felinfoel sent letters to the CarPress Managing Director and the Head of Hoesch-Krupp in Germany appealing for a gesture of 'Christmas goodwill' and 'an act of imagination and generosity' by reinstating the workers with no strings attached. Their pleas were rejected.
The Llanelli Trades Council also pledged unanimous support for the CarPress workers, stating that 'the management were attempting to destroy the trade union movement, sack the activists and castrate [sic] those remaining members'. The Trades Council also said it was mindful of the fact 'that the attacks on the Trade Union movement would continue and that an injury to one is an injury to all.' Despite these bold words, no practical support was offered. ('D-Day for the CarPress Crew', Llanelli Star, 1.12.94; 'Unions Blast Plant Chiefs', Llanelli Star, 29.12.94).

other less conspicuous divisions emerged on the shop-floor sufficient to weaken unification and solidarity.

The two workforce attitude surveys (October 1994 and November 1995) detected attitudinal differences between older and younger workers and particularly, between workers with different lengths of service, on issues associated with seniority, teamworking and industrial relations (see Appendix B). Less experienced workers tended to be less oppositional; and although their attitudes rarely completely contradicted those of the more experienced workforce, the relatively higher number of 'undecided' respondents amongst this group reflected a greater degree of apathy and passivity towards change. The view of a young Honda teamworker was both typical and instructive here:

> I think there's one big difference between younger people like myself and the older workers at CarPress. The older men are all too set in their ways. They've been used to coming here for three basic reasons: marriage, kids and mortgages. They've been used to nothing else, nothing's ever changed in their lives for twenty years or more. But me, I'm young, I'm not interested in that crap, I'm interested in other things, you know? The three things I'm interested in are cars, beer and women. That's all. So to tell you the truth, I don't worry about changes at work here, it really doesn't bother me. I'll do anything to get the money into my hands. The only thing that bothers me is that I'm able to spend it to have a bit of fun before it's too late!

Such values reflect the relative lack of class awareness amongst young people in the 1990s which in turn is a function both of contemporary adolescent youth cultures and the growth of youth unemployment (Bradley 1996). Of course, these values also create a new set of headaches for managers; but their immediate problem, in the

brownfield context of the management of change, is to separate the 'experienced obstructionists' from the 'inexperienced submissives'. The CarPress toolrooom manager commented:

> Of course it's easy for them [the Japanese] with their teamworking on greenfield sites, they're working with new, young, green people who will do what they're told to do. But in the older factories people will feel part of the old workers' culture with all the demarcations that go with it. And I don't believe it's a case of bad individuals necessarily, it's really the case of the type of factory that these individuals walk into which then changes them.

The management therefore purposively created age and experience-based shop-floor divisions by concentrating recruitment on young people, whether on a permanent or temporary basis, separating these workers off into discrete teams and then nurturing pro-company, pro-customer attitudes by, as one quality manager put it, 'coaxing them all the time, bringing them along, keeping our eye on them, making sure they are looking at the customer's needs'.

The historically fragmentary nature of autonomous shop steward control contributed to further divisions. Craft and seniority demarcations, the disparities of piecework and the different personal qualities and political positions of the stewards, together impart different degrees of local control over work. At CarPress and elsewhere in the auto industry it created a situation where, 'work groups were thus competing against each other to maintain their pay positions as well as against managerial control, so that their aspirations were sectional and fragmentary' (Marsden et al. 1985, p.145). For example, the divide between the CarPress assembly and press shops was not merely

technological or spatial. The press shop workers tended to display a more macho image and looked down on their assembly shop colleagues, 'the press shop employs real men, we're handling 800 tons of steel a week', one operator typically explained. Increasing labour mobility was beginning to undermine this divide but even so, the two groups rarely communicated with each other. This even extended to union organization. Although both groups of operators were TGWU members, for historical reasons they insisted on maintaining two separate union branches. One senior steward commented that, 'sometimes it's like a "Berlin Wall" between the two branches'. Political divisions such as this continually hindered the attempts of the more progressive shop stewards to mount effective plant-wide campaigns.

Management by fear

Shop-floor isolationism and division therefore undermined the construction of a disciplined, broad collective resistance necessary to oppose managerial prerogatives and particular acts of management aggression. But the attendant discord and defeatism were also a consequence of an environment of fear. CarPress exploited two particular aspects of this: a fear of the dole and a fear of the customer.

Chapter Four began with an account of the restructuring of employment opportunities in Llanelli. The town has suffered consistently high levels of unemployment for nearly two decades. The fear of job loss, particularly among CarPress's young workers, was acute. Hardly an interview or more informal conversation went by without the subject being raised in one form or another, particularly in relation to managerial attitudes. A toolmaker characteristically remarked:

> Yeah, unemployment's had a real impact here. As far as we see things the days of full employment are going fast. A lot of the youngsters in Llanelli have never had a job at all. We've been lucky here mind but we're fighting to keep ours now. And really all these changes and practices that have been forced upon us all boil down to that. They all boil down to the threat of unemployment. That's how the company has got away with it.

CarPress exploited local labour market conditions in a number of ways in its attempt to secure a compliant workforce. Firstly, although for some the fear of unemployment may remain abstract for as long as the jobless remain outside the factory gates (Fevre 1989), attitudes change if the gates are opened. Following the example of a number of Japanese transplants in the region by increasingly utilising young temporary workers, CarPress harnessed the fears and hopes of Llanelli's 'experienced' young unemployed whilst simultaneously undermining the security of its permanent workforce in the pursuance of higher labour productivity. Secondly, the proposition that any workers displaying the temerity to oppose managerial prerogatives would be likely to join the ranks of the unemployed became part of the natural vocabulary of the shop-floor supervisors. In some respects, this was little different to the employers' use of Roy's (1980) 'fear stuff' tactics to prevent organised labour opposition in the American South, twenty years ago. As one woman in the assembly shop said, their habitual retort that, 'you either work the way I tell you or it's down the road for you - there's another 500 where you came from' tends to sap shop-floor self-assurance when repeated often enough, especially inside factories that are continually fighting for survival. Thirdly, this is particularly so when management has sufficient confidence

to prosecute the threat. As another worker commented on his questionnaire (November 1995):

> Since the termination of employment of 21 individuals the company has ruled by fear and is inflicting a dog eat dog atmosphere on the shop-floor. All attempts to make the operator feel more a part of the company are an affront to our intelligence. You are a clock number full stop. When they shout "shit!" you jump on the shovel.

Product markets also connect with managerial control strategies in ways which restrain worker resistance. Since CarPress's Llanelli plant opened in 1962 its organizational ethos was built around the belief that 'quantity is king'; success was measured in terms of consistent fulfilment of a weekly quota of parts to Rover's main car assembly plants. Intense global competition, contractualisation and a more accurate synchronization of product supply with demand undermined this ethos and placed a new onus on the 'needs of the customer'. The impact of these changes on work organization and the labour process is described in various parts of this thesis. Here, we consider their impact on worker consciousness. It was profound. The CarPress Personnel Manager:

> If we'd sacked 21 operators from this plant as near as 12 months ago we would have seen an all out strike here, with a 100% vote, there's no doubt about that. It just shows how attitudes have changed. We really have worked on that. We've made the shop-floor far more aware of what it means to break your employment contract. And I think we've successfully bred a new culture of customer awareness, we've made the shop-floor aware of where the customer lies in the chain and we've made them start to think about being responsible for their actions.

Chapter Four described how final assemblers in the chain of mass production intervene in the management of their first tier suppliers in order to secure maximum quality, minimum prices, acceptable working practices and crucially, a risk-free, continuous supply of parts. If the latter is placed in jeopardy, their interventions may become more threatening. For example, during a number of the overtime bans described above, Rover sent teams of purchasing, supplies and logistics personnel to the CarPress plant to organise contingency plans for maintaining production. These personnel also spent time on the shop-floor cajoling operators into submission, warning them they were placing their jobs at risk. During the crucial new working practices dispute in 1994, Rover managers suddenly arrived in the press shop and threatened to permanently remove their press dies. This decisively affected its outcome. One operator told the author:

> The management told us that unless we accepted the package on the same day our pay rise and jobs would be taken away. And they'd done a good job you see, bringing the Rover boys down. They were really putting the frighteners on. We've taken on about a hundred new young lads here and they threatened them all with the dole.

So the strike-breaking interventions of the customer can have a sobering effect in particular circumstances. But such actions are merely single, albeit unfamiliar, manifestations of a more pervasive and malignant customer influence. Many CarPress workers blamed management's aggression, its introduction of new working practices and their own inability to frustrate this on the new customer prerogatives. Indeed, as one inspector intimated, the ramifications of the contemporary imbalance of power

between the producer and the customer were embedded in the shop-floor's collective consciousness:

> Attitudes have changed on the shop-floor alright. There's this real realisation that if you go on strike your customer will get hit and just get up and go somewhere else. This is a real change. There's definitely a strong awareness of this especially among the younger workers on the line.

Moreover, the construction of an additional, more intimate social relationship between the teamworker and the customer provided another corrupting influence on shop-floor solidarity. CarPress sought to pervert customary notions of workplace democracy and instil a new sense of personal discipline by substituting team responsibility to the customer for traditional collective accountability. The views of two young teamworkers supplying Honda and Toyota reflected the success of this strategy amongst some groups:

> I've built up a sort of loyalty with Honda, I don't know, it just seems to come down to pride. I am much happier here, I'm more involved. And loyalty makes you feel guilty some times if you make a mistake, it kind of makes you feel more responsible for the job.

Another:

> Oh yeah, we're directly involved with the customer all the time. I mean if there's quality problems with the parts the Toyota management might ring us up direct, senior management sometimes, and we might ring them. And they call us by our first names. So this makes you very careful about the job. You don't want to let them down. You're always watching what's going on, watching what you're doing, because it's obvious , it's your job that's on the line.

This ideological dimension to the enhancement of management control follows contemporary developments elsewhere in industries subject to 'Japanization' (Delbridge et al. 1992; Oliver and Wilkinson 1992). Moreover, it is not in itself especially new. For example, Pignon and Querzola's analysis of work organizational changes in the American telecommunications industry two decades ago discerned evolving team-based principles aimed at modifying the social form of work in ways which both provided workers a measure of trust and induced a new accountability to the customer. In this environment, 'employees are no longer confronted with the boss as the person they are responsible to but rather with their customers and with the market' (1976, p.75). However, qualitative ideological differences emerge when these new relationships are placed into the highly disciplined, closely supervised, low trust social relations of lean, mass production. As the above examples testify, a worker's perception of the customer may take on a new dimension in the context of the different ways in which contemporary customer-supplier relations act to circumscribe shop-floor resistance. Significantly, despite the plant's immediate legacy of a classic Tayloristic culture, 81% of CarPress's shop-floor workers indicated in the second questionnaire survey (November 1995) that they thought about the requirements of the external customer as they carried out their work; 52% indicated 'most of the time', only 13% indicated 'never'. Perhaps this does denote the emergence of positive attitudes towards product quality but such customer awareness also reflects the power of a new alienating hegemony on the shop-floor: a customer hegemony thriving on fear of retribution as much as customer satisfaction. The participative ideology of TQM may seek to obscure these processes but it is this real fear and insecurity which underlie the current fashion for 'customer care'.

This chapter provides evidence that the employment relationship of the 1990s is not conflict-free and that in particular, the 'Japanization of work organization' is not unproblematic. If the new management initiatives constitute rational attempts to intensify rates of labour exploitation then we must expect worker resistance, including traditional collective forms.

The social relations of this Japanization process, therefore, contain a paradox. Whilst lean production regimes may, theoretically at least, depend on cooperation and high trust relations through teamworking and kaizen, workers' actual experience of effort intensification, stress, fear and insecurity will ensure the reproduction of the same low trust relations and conflict inherited from Taylorist work organization. The next chapter considers the methods by which CarPress sought gradually to mitigate these inherent tensions by mobilising ideologies of consensus and shared interests. However, the company came to realise that in the short term, securing shop-floor cooperation does not always require trust-building measures; 'cooperation' through coercion may suffice, provided environmental conditions are favourable. The distinctive economic and political conditions of the current period provided such an environment. It allowed management to exploit the different processes of shop steward incorporation; the legal interventions of the capitalist state; pervasive job insecurity; the new customer relationships; and internal class divisions, all in ways which profoundly weakened shop-floor resistance.

The 'management of change' at many brownfield plants progresses on this basis. For a good number of workers, this is the reality of 'Japanization' and the 'New Industrial Relations'. It may involve a systematic suppression of rank and file dissent, and for those who do not respond to this treatment, the removal of certain basic rights: the right to work, the right to participate in decision-making at work and the right of freedom of association. Until the balance of power between capital and labour begins moving towards the latter, some collective forms of working class resistance to these changes will remain critically restricted, whilst other, more covert forms will emerge. In the meantime, the underlying managerial tensions that accompany the contradiction between the contemporary ideology of 'worker empowerment' and the harsh reality of labour exploitation in lean production will continue:

> All changes have been forced through in an atmosphere of threats, intimidation and above all, fear. All talk of teamworking, co-operation, etc., has proved to be nothing but empty rhetoric. The sad fact is that management now behave in a way that is draconian, dictatorial and anti-union. This of course they are able to sustain with the support of oppressive labour laws and with a workforce that is captive owing to mass unemployment. The sad fact is that a management that is unchallenged will be unchallenged in making bad decisions. *(Press Shop Operator, Questionnaire Comment, November 1995*).

CHAPTER EIGHT

THE IMPACT OF HUMAN RESOURCE MANAGEMENT

The introduction of lean production control and new management techniques at CarPress undermined the shop-floor's traditional defences against the imposition of managerial prerogatives. The last chapter explored how the company responded to the attendant worker resistance by embarking upon a process of incorporation of union officials and senior stewards and by mobilising a number of explicitly coercive measures against the rank and file. The efficacy of this strategy depended upon a propitious external environment of control. However, this factor alone meant that a sole reliance on coercion could be self-defeating in the longer term; the distinctive economic and political conditions which made the strategy possible would not hold indefinitely. Moreover, the required investment in the various concrete mechanisms of coercive management control can be both prohibitive and inefficient compared to measures aimed at building worker commitment. As Thompson and McHugh put it, domination by coercion requires 'constant reinforcement of coercive pressures and extensive monitoring of reactions to them. Domination of the individual through self-limitation and constraint is far more effective. This is engendered through individual assimilation of, and accommodation to, dominant workplace cultures and ideologies' (1990, p.294).

Most managerial analyses of Japanization emphasise this more sophisticated form of worker subordination. For example, Oliver and Wilkinson argue that, 'many Japanese-style manufacturing practices require *willing* cooperation, not mere compliance, on the part of the workforce' (1992, p.175), a willingness to perform extra tasks and take on new responsibilities. These authors argue that the introduction of Japanese practices into the UK will be problematic unless employers simultaneously mobilise new, employee-centred strategies based on the kind of principles outlined in Guest's (1987; 1991) paradigm of human resource management[1]. Similarly, Kenney and Florida (1993) maintain that Japanese 'innovation-mediated production', involving wider worker responsibilities as well as more intensive basic labour processes, relies on various managerial instruments of social control and socialization to secure workers who identify as closely and completely with the company as possible (p.274).

Theoretically, therefore, creating authentic worker commitment and loyalty constitutes an important facet of successful Japanese work organization. Yet, the survey of personnel policies in the South Wales Japanese transplants demonstrated something less straightforward than this facile functionalist fit between 'soft' HRM policies supporting 'hard' production control techniques. New workplace cultures and ideologies did obtain in many of these firms; but these were not built upon the principle of extensive employee participation, and through this, a close affinity for the

[1] Guest (1987; 1991) provides four central HRM policy goals: integrating HRM issues into corporate strategic plans; attaining both high employee behavioural commitment to pursue agreed management goals and high attitudinal commitment towards the enterprise in general; raising both the quality of management behaviour towards employees and the quality of employees' skills and qualifications; and finally, introducing workforce functional flexibility and an organic, organizational flexibility capable of meeting the challenge of market-led changes.

enterprise. The pace and intensity of lean production rarely provide the time, space or material conditions for anything so adventurous. Instead, the various social control and socialization measures employed, such as distinctive recruitment procedures and direct communication techniques, were designed primarily to maximise individual and team performance, to secure accountability for performance and to engender an awareness of responsibility and commitment to the customer. These measures contributed to a dominant workplace culture which aimed to build a collective understanding of the relationship between performance in production and the disciplines of the capitalist market.

This chapter investigates the extent to which the same ideological processes of social control took hold at CarPress, once again focusing on their impact on the workforce. Following a similar pattern to Chapter Three, it considers recruitment, selection and equal opportunity policies; job security and labour retention policies; employee involvement, new communications and single status; and finally, worker loyalty and trust.

A NEW RECRUITMENT POLICY: THE PURSUIT OF COMMITMENT

Recruitment and Selection

When it acquired Rover's Llanelli plant in 1989, CarPress inherited a casual, unsophisticated recruitment system reflecting management's perception of labour as a cheap commodity to be recruited or discarded in accordance with the immediate demands of product markets. These principles held for many traditional British firms operating in Wales (Morgan and Sayer 1988), where managing numbers took precedence over monitoring individual performance and attitudes.

The plant utilised a recruitment method called the 'family' or 'community' system. Labour requirements would be posted up on notice boards so that names of potential recruits could be submitted by the workforce. These would invariably be family members or close friends living in the vicinity. The system relied upon the intimate connections that characterise close-knit communities and entailed minimal administrative costs for the personnel bureaucracy. It was also, of course, effectively controlled by the shop-floor.

The restructuring of work under the new CarPress management placed fresh demands on the workforce: greater effort, a willingness to work more flexibly and a willingness to take on extra tasks when requested. As we saw in the last two chapters, the management attempted to create the conditions for compliance with these changes both by fostering pro-company attitudes amongst the less experienced members of the workforce, some of whom were separated off into discrete teams, and by gradually

breaking down the resistance of the experienced majority. In quantitative terms, this segmentation of experience was heavily skewed towards the latter more 'troublesome' group[2]. Consequently, in late 1993, following a dispute with the plant's TGWU membership, the company succeeded in taking back full control of the recruitment system and commenced selecting only those individuals who, by virtue of their age or employment history, had little experience of working in a traditional unionised firm.

A lack of personnel resources prevented CarPress from using the same cautious and scrupulous selection techniques utilised in Japanese auto transplants located in the UK and USA[3]. Instead, the personnel department initially screened basic biographical data on application forms. Candidates then performed 3 aptitude and manual ability tests and attended just one interview with production and personnel management. Apart from employment history, the most important selection criteria were manual ability, physical ability, attitudes towards flexibility and change at the workplace, and above all others, attitudes towards absenteeism. Successful candidates were closely monitored for performance and attendance during a 3 month probationary period.

This important shift in recruitment strategy took a further turn after the sackings dispute described in the previous chapter. The proposition that manufacturing firms are beginning to exploit temporary labour in a coherent, systematic manner continues

[2] Of the 533 respondents in the second questionnaire survey (November 1995), 63% had more than 10 year's service with the company and 78% were aged 31 or above. Only 26% had 5 years service or less.

[3] At Toyota's new vehicle assembly plant in Derby, the selection process can take between 2 to 6 months. It comprises a daunting series of interviews, psychometric tests, observation quizzes and different days spent at an assessment centre (Bailey, 1995). Similar techniques allow Japanese auto plants in the USA to weed out 'troublemakers' and dissidents and to select group-oriented workers who identify with the company (Fucini and Fucini 1990; Kenney and Florida 1993).

to attract doubts from some academics (see for example, Cumbers 1996; Fowler and Bresnen 1991; Marginson 1989; Pollert 1988, 1992). Yet one recent survey of union representatives in 1,000 establishments found that whilst temporary contracts continue to be used to manage fluctuations in product demand, 52% of firms were increasing their numbers of temporary workers *at the expense* of permanent jobs (Labour Research Department 1995). Moreover, the survey of Japanese transplants in South Wales demonstrated that the use of temporary contracts facilitated many of these firms' lean manning strategies whilst simultaneously providing a cheap and effective screening mechanism for new recruits. CarPress began using *temporary labour in a* similarly strategic fashion.

Since they left school, many of the 60 young temporary workers employed during the sackings dispute had drifted from one meaningless training programme to another, from one low paid job to another. When they walked onto the CarPress shop-floor they recognised an opportunity for engaging in something potentially much better than this sordid cycle of human waste and they worked as if their lives depended on it. The management was impressed. The Personnel Manager commented at the time:

> It's been marvellous! You know the Mini door section in the Assembly Shop? Everyone knows that it's the easiest job in the shop. The men have always reached their targets with ease and of course they've always been the older men due to the effects of the seniority system. Well guess what. Of the 105 operators we suspended, we managed to include every operator from this section and we were then able to replace them immediately with temporary labour, young kids the lot of them. And now, after just 3 weeks on the job, those boys have broken all productivity records. They've literally beaten every record set by the older men, men who have been in this plant for 30 years some of them. And that's just after 3 weeks!

> Not only that, the fitters have told us that mysteriously these kids never get any machinery breakdown times, even though they're working the same line and the same machinery as the older men used to. Machinery downtime has virtually disappeared on this section. Now doesn't that say it all?

The unions had a long-standing agreement with the company that any temporary worker employed for more than 3 months must immediately be offered a permanent contract. The agreement was important because it provided the shop-floor some protection against wage-cutting and job insecurity. Accordingly, in the summer of 1995, after already conceding one 3 month extension, the shop stewards insisted that the company make the 60 youngsters up to permanent employees or release them. Amidst much public acrimony, in which the unions received most of the blame, the company cynically dismissed all sixty. But it also exploited this episode to replace the agreement with a new policy. From January 1996, every new recruit would be employed as a temporary worker. Labour contracts could be cancelled or extended at the whim of management whilst individuals who showed themselves to be outstanding performers with pro-company attitudes might be taken on permanently, workload permitting. In preparation for this, CarPress advertised for nearly 200 new temporary workers towards the end of 1995.

Fevre (1989) argues that in the loose labour market conditions of South Wales and other depressed regions in the UK, temporary workers' attitudes are shaped by the disciplinary experience of temporary employment as well as unemployment. They possesss the certain knowledge that they are likely to become unemployed again in a short time: 'they are always looking for work, and always act as if they are outside the

factory gates, hammering to get in, even when they have employment' (p.151). In these circumstances, such workers will always constitute an acquiescent and malleable pool of labour. Moreover, in offering a minority of carefully selected workers the tantalising prospect of breaking out of this life of relentless job insecurity, CarPress, and many of the neighbouring Japanese transplants, exploited the large pools of unemployed labour in the region for purposes additional to maintaining their lean manning strategies or boosting labour productivity. That is, the careful selection of prime candidates for permanent work formed an important component in their construction of new corporate cultures of cooperation and compliance. Therefore, attempts to categorise different workforces simply in terms of segmented core and periphery groups (Atkinson 1985) conceal some of the internal ramifications of a firm's flexible employment policy. CarPress embarked upon a strategy of using periphery temporary workers to *interact* with the core not merely to produce a disciplinary effect but to help catalyse changes in attitudes and culture within the core itself.

Equal Opportunities

In keeping with the currently pervasive corporate ideology of granting 'respect' and 'opportunity' to all employees, as enunciated by literally thousands of company mission statements throughout the country, CarPress claimed to be an equal opportunities employer. In practice, the company employed no ethnic minority

workers[4]; as we saw in the last chapter, it readily dismissed disabled workers with inferior absenteeism records in a quite amoral fashion; and as we discuss below, rather than encourage the employment of women workers, it relentlessly victimised them.

At the end of 1994, the company employed just 45 women out of a total workforce of 767. None were managers, supervisors or engineers; 27 were clerks and administrators; the remaining 28 were employed on the shop-floor as semi-skilled operators. Although no longitudinal data were available, the management admitted that this represented a substantial decline. One operator remembered that in past years there were 50 women employed in the press shop alone, an area where the manual work could be particularly arduous.

The macho culture that often accompanies heavy metalwork partly explains this decline. For many of CarPress's male managers, engineers and shop-floor workers, this was 'real men's work'; working lives were dominated by the continual lifting and shaping of heavy steel sheet and by the grime, noise and rhythm generated by giant metal presses and welding machinery. In this sense, the men had appropriated the technology for their masculinity, the work had become gendered (Cockburn 1985). As an MSF representative commented:

> I'm not against equal opportunities but it's difficult in some environments. This is a predominantly masculine workforce, many of the machines are historically masculine if you

[4] In 1991, members of ethnic minority groups comprised only 0.4% of the total residents in the Llanelli travel to work area (Office of Population Censuses and Surveys, 1991 Census, County Report, Dyfed, Parts 1 & 2). Despite this, at the end of 1994, the CarPress Personnel Department confirmed that a small number of the 1000 job applications in the firms 'waiting file' came from members of these groups. However, they had never been considered for interview.

> see what I mean. The thought of my wife hauling bits of steel around doesn't exactly fill me with joy. She'd end up with arms of Samson. In fact there are few women in any significant position here. It's sad, I've no doubt some of the women are sharper than the men but even in the offices there's a strong male culture. We all swear a lot. We all like our men's talk, you know? There's nothing wrong with that is there?

Although these attitudes provided the cultural context for gender inequality at the factory, they do not fully explain why this inequality deteriorated further. In the past, some women had survived and even thrived in this masculine environment. As a clerical worker, who eventually moved off the shop-floor, reminisced:

> I tell you, in my day, the shop was far more physical than it is now. I used to work on the Morris bonnet assembly lines and in those days you were dealing with thick steel, not the flimsy stuff you get nowadays. And us girls were faster than the men. I was faster and I had to work out of necessity. I needed the work and I worked hard I can tell you. We all worked faster than the men, so don't tell me women can't do it.

Despite the fact that women were perfectly capable of performing many tasks on the shop-floor, most CarPress managers remained reluctant to employ them. When quizzed about this, these men offered a number of excuses. Women workers were incompatible with the new flexibility because they were 'physically incapable of performing the more arduous jobs'; too many women displayed 'a pin money mentality'; or, since the Equal Pay Act came into force, the company enjoyed no advantage in employing women who possessed the 'wrong temperament for heavy factory work'. Even the senior stewards were not particularly sympathetic. One remarked:

> To be honest, looking at things from management's point of view, this is not the sort of place where you can come in sick. You have to be on your toes all the time or you'll end up having a serious accident. That's the problem for the women. They're different aren't they? Their bodies are different for a start. They've got the monthly problem and they can't keep going out sick every time.

Thus, the men in different positions of authority defined women in terms of domesticity. Following similar processes to those identified by Cockburn's (1995) recent studies of gender inequality at the workplace, women's 'natural' attributes were articulated with domestic ties and maternal responsibilities and then constructed as drawbacks in the sphere of production. Once these ideological assumptions were placed into the material context of capitalist rationalisation, demanning and consequent lean production - where maximum labour utilisation, attendance and effort were at a premium - then, for many managers, the retention of women became a 'problem'. A number commented that women were no longer suited to the stress and speed of work on the shop-floor. And if any women complained they were not likely to receive sympathy. As one superintendent said:

> We have to tell them straight, "you're all supposed to be into equal pay aren't you? If you can't do the work then you'll have to get out, it's as simple as that. I'm supposed to be running a press shop here not a kindergarten you know".

Sex discrimination law prevented management from overtly selecting women for redundancy. However, to maintain its lean manning strategy, CarPress operated a long-running voluntary redundancy scheme. In response to the increasingly harsh treatment from their foremen and managers, and an indifference to their problems from many senior stewards, a good number of women left the company. Those who

remained needed an especial toughness and tenacity to preserve their hold on a living wage. For example, some were sectioned off into an area that the shop-floor appositely named 'Bosnia'. It was cold, it had no proper heating system, winter draughts would blow through cracked windows and roofing sheet, and yet in this environment the women were expected to perform rapid light assembly work with targets of up to 1000 pieces per hour. One 'Bosnian' woman protested:

> We've been fighting for years to get heating but the management have ignored us just because we're women. If it gets cold in the main shops the management bring in the heater cannons for the men. But not here. Not likely. Some winters I've been working in here wearing 4 jumpers at a time and we're always wearing them out. Sometimes we even work in our coats. Can you imagine it? It got so bad, I was off sick last winter with chilblains. I could have got bloody frost bite! But the management didn't care. They didn't believe me. My boss rang me up and told me to come in immediately or I'd be sacked. It's just like slave labour.

The exigencies of capitalist mass production combined with managerial patriarchy to abuse women's bodies in the main shops as well. Annette, another 'Bosnian' woman who transferred out of the press shop, spoke at length about this:

> When we worked the big presses some of the metal guards would quite regularly spring up and hit you on your breasts if you didn't have your wits about you. It could give you a real nasty knock with bruises to show for it. And just as often we'd be put on machines which were too difficult for us to operate. We couldn't reach into the tools [dies], we just weren't tall enough. So we'd complain to the foreman but all he would say was, "if you can't do the job then we don't want any more women in here do we?" Then he'd have a good laugh at us. It used to feel degrading. Sometimes you actually had to bend right into the machines and the men standing behind you on the line would be laughing and catcalling while you were on tiptoes trying to reach in.
>
> And we've been involved in some nasty accidents too. Some of those presses can develop faults. Sometimes they go into a double cycle with no warning at all so that the safety bar

> would come up the first time when you're expecting it but then suddenly spring up for a second time when you're not. And it knocks you right back. The bar will then knock you in the chest and give you some right nice little bruises.

These women were not seeking preferential treatment or even 'positive action' on the shop-floor; they merely demanded protection from the harmful concrete ramifications of a managerial system that is obsessed with production, output and profit. They were, of course, refused.

Such managerial behaviour constitutes the antithesis of equal opportunity policy. Lean production is a highly efficient, low-waste system of surplus extraction and capital accumulation demanding workers who are most likely to consistently fulfil the strict attendance and performance criteria of the employer. As we discovered in Chapter Three, the interaction between capitalist social relations and patriarchal relations in the Japanese electronic transplants in South Wales ensured that these workers may be young women with the necessary dextrous skills who also display the 'commitment' that naturally accompanies their need for a basic family income. And at factories like CarPress, increasingly, they may be the 'experienced unemployed', men with the obligatory stamina for continual production work on heavy machinery who similarly display the 'commitment' that follows the desperate quest for a first decent job. Either way, questions of equal employment rights, parental leave, sick leave, the needs of women, the needs of older workers and special measures for disabled workers become marginal matters. Lean production regimes enlist ideologies of equality which often mask enduring forms of structural disadvantage for many workers. Their recruitment and selection techniques may be more proceduralised and

scrupulous than hitherto but these will not necessarily incorporate the principle of equal opportunity at work.

MARRIED TO THE COMPANY, IN SICKNESS AND IN HEALTH: LABOUR RETENTION AND JOB SECURITY

Between the years 1978 and 1985, as in many UK manufacturing firms, the BL/Rover workforce was butchered; a series of rationalisations and plant closures caused the combine's employment to fall by 114,000 (Williams et al. 1994a). During the decade following 1981, as part of this process, CarPress's Llanelli workforce halved in size. In this context, the author's attempts to discuss with different employees Japanese notions of 'jobs for life', were plainly inopportune. Job security was central to the workers' concrete interests, yet in the barren environment of mass unemployment it remained merely an aspiration, a desire for a basic right that could be cruelly manipulated by management's demand for change. A press shop operator:

> Look, we're all in the same boat here, we're no different to anybody else. If you're a worker you've got the same interests wherever you are. You go to school, you try to get yourself some qualifications, you try and get yourself a job, you go to work and then you want your job security. You need job security in order to plan your life, to get a home for your family, to get a car and other things in life. They're the concerns of all of us. And because of that, the fear of losing these things, the fear of losing the dignity that you have in work, the real fear of redundancy, they're in your mind all the time.

One quality inspector knew only too well the effects of managerial manipulation here:

> The management are clever. They'll often issue a redundancy notice just before the annual pay talks start up and then they don't tell you who's got to go. So it's issued as a general threat, to sober us up, you know what I mean? It leads to a lot of uncertainty. Then the management will wait a few months and they'll re-issue the same redundancy notice. Again, no names, so it creates greater uncertainty. It's all about playing on your nerves. It's the company playing with your life all the time. It becomes a life of fear. You can't plan for anything. You can't plan for a home, for your mortgage, nothing. So what do you do? I'll tell you what you do. You either give in or you turn into a militant.
>
> I used to be a toolmaker. Do you know, during my time in the toolroom I received 11 redundancy notices in 6 years. Notices telling me I'll be outside the gates in a couple of weeks time. Then at the last moment they're suddenly withdrawn. Now how can you live like that? Me, I did end up a militant. And the company repaid me. I got thrown out of the toolroom and dumped on inspection.

The new working practices agreement attempted to temper shop-floor opposition with a commitment of no compulsory redundancies. However, like the Japanese transplants in South Wales, and indeed, Japanese transplants in North and South America, workers were forced to trade an acceptance of greater numerical and functional flexibility in return for a job security that market conditions could periodically undermine (Black and Ackers 1994; Humphrey 1994; Kenney and Florida 1993). As the plant's chief production manager commented:

> There's no God given right for anybody in any company to have a job for life. We all hope for the best of course, many of us hope for a long stay at CarPress, but nothing in life is forever. And if there is such a thing as "jobs for life" it's only there if the company is making a profit. We're not a registered charity you know.

Nevertheless, during the 1990s, CarPress did eschew the traditional 'hire and fire' employment methods inherited from BL and Rover. Instead, by means of voluntary redundancy programmes and natural wastage, the ageing core of the workforce was only gradually reduced and then replaced by judiciously recruiting younger, less experienced workers; higher workloads were maintained by the redistribution of tasks; whilst the exploitation of temporary labour helped the company manage product market fluctuations.

Moreover, as we saw in the last chapter, management succeeded in appropriating the distribution of overtime from the shop stewards. Now, production variations could also be realised by extending working time, without hindrance from the unions. Although overtime premia costs prevented management from extending hours on a continuous, plant-wide basis, particular groups of process operators and skilled workers did experience acute labour intensifying pressures in this way, none more so than the plant's maintenance fitters.

Between 1984 and 1994, cost reducing labour flexibility measures caused the plant's skilled maintenance staffing levels to fall by 50%; in addition, all general hands and fitters' mates were made redundant. Manufacturing and maintenance labour costs were further reduced when the plant moved from a standard 3 shift to an alternating days/nights plus twilight shift system in 1994. At the same time, as we saw in Chapter Five, the plant's worn-out machinery was consistently pushed beyond the limit to meet customer demand in an environment of continuous production and low buffers. The combination of frugal resources, no preventative maintenance, perpetual machine breakdowns and managerial coercion forced many of the remaining maintenance staff

to virtually double the length of their working week. In such circumstances, these workers enjoyed a funny sort of 'job security'. Two electricians angrily reflected on this:

> In the last 6 months the press shop's been operating flat out. It's been going all day, all night just keeping up with the customer's requirements. Everything is driven by the customer these days. That takes precedence over everything else. So you've got your maintenance staff working an extra 3 hours every day to cover overtime on production. Then on Saturdays we're working from 6.00 in the morning to 6.00 in the evening. On Sundays we're doing the same and often straight through to the night shift.
>
> Some of us have been doing this for 6 months continuously. And things are getting so bad with the manning that we're only getting 2 electricians on each shift. So, on average, the maintenance people now, we're working 65 to 70 hours per week. And it's all virtually compulsory. If you say no you get threatened with the sack.

Another:

> And these alternating days and night. It's fucking terrible. I'm never at home, my wife never sees me. I've got no social life whatsoever. The alternating shifts are bad enough. But when the plant has been on a 3 shift system for 20 years then those shifts become part of your working life. Your body gets used to it. And now we're suddenly get taken off it and forced to work one week days, one week nights, plus an extra 30 hours on top! You end up with health problems. Sometimes it just gets unbearable.

In more favourable external labour market conditions, many workers subject to such stress and pressure would seek alternative employment elsewhere. However, in the mid 1990s, these conditions favoured capital not labour; they reinforced the high level of labour retention necessary for CarPress to successfully operate its system of continuous, lean production.

Labour retention has other facets as well. Although the plant's labour turnover was low, the absence of generous manning levels and high buffers exposed poor labour attendance as a potential threat to production. Therefore, like its neighbouring Japanese transplants in the region, CarPress placed a high premium on reducing absenteeism. To this end, the management introduced new disciplinary measures against absence due to both sickness and injury.

In 1990, CarPress diminished the sick pay scheme inherited from Rover by setting payments below basic rate earnings and restricting these to 40 days in any one year (the Rover scheme paid basic rates for a full year). Furthermore, the company sought worker accountability for absence by introducing measures such as strict return to work interviews and regular home visits. Although, on the surface, this latter approach was little different to contemporary management practice elsewhere[5], CarPress followed it with an especial determination. An assembly shop superintendent:

> The control of sickness is a perennial problem here. For example, I was called in recently by my director to discuss deteriorating absenteeism in the assembly shop. Now, I had to explain to him that for some reason an unusual number of my operators were off sick with a variety of broken bones. Legs, arms, shoulders, you name it, they broke it. God knows what they'd been up to. None work-related but real sickness, nevertheless. The response of this director was to

[5] A recent IDS Study based on CBI data found that many employers are currently focusing their attention on employee absenteeism because of the costs of both sick pay and disruption to production. Many are attempting to secure worker accountability for absence using measures such as the return to work interview more scrupulously than hitherto (IDS 1994a). Another recent TUC survey of 171 workplaces found that employers were reducing the costs of sickness absence by tightening their absence control policies and sick pay schemes and taking health more into account in the recruitment process. Women, older people and disabled workers suffered particular discrimination here (Welfare at Work, 1996).

> say, "well you'll have to go out and sack the lot of them!". And he was serious! Now I can be quite hard but I have a heart. Some of our directors have no logic and no heart either.

The operators were not sacked in this case, but they received a severe reprimand upon their return to work. Individuals suffering work-related injuries - and these were habitual at CarPress - were treated in similar fashion. The most common injuries were lacerations from handling sheet steel (some of which could be severe); knocks, bruises and sprains from the press safety bars; damage to eyes from metal splinters and welding flash; and general welding burns. More serious injuries such as fractures and amputations occurred much less frequently. An AEEU health and safety representative commented on the company's safety record:

> The problem we've got is that half the machines in this plant are falling to bits. Some of them are in a terrible state. In the old days they always used to be repaired and maintained at weekends but now that's all stopped because of lack of money. These days we're told everything's down to the customer. Nothing must get in the way of meeting the customer's needs. So yeah, the customer rules here alright. But all this talk about a customer philosophy, it can actually end up hurting people. People get hit. But I don't think the management are bothered to be honest. They're totally obsessed with production, it's all they think about.

This managerial obsession extended to treating absence through injury as a threat to production rather than a consequence of it. Stage by stage, the management introduced measures which forced all but the most seriously injured to report for alternative work. This culminated in a detailed procedure which established that, 'a collective effort must be made to ensure that employees are not sent home from their workplace whilst they can be gainfully employed in work outside their normal range

of duties'[6]. A good number of workers provided personal anecdotes of how they or their colleagues were forced to report in for light production duties with severe lacerations, damaged eyes, even broken limbs. And this was not just a matter of managerial vindictiveness against certain individuals; it was another manifestation of a coercive management control on the shop-floor. CarPress was intent on sending out a more general message that absenteeism would no longer be tolerated.

The success of this strategy is presented quantitatively in Table8.1.

Table 8.1, Total Accident and Lost Time Accident Record, 1991-1995[7]

YEAR	TOTAL NUMBER OF ACCIDENTS*	ACCIDENTS PER EMPLOYEE**	LOST TIME ACCIDENT FREQUENCY RATE***
1991	2516	3.82	82
1992	2032	3.04	54
1993	2040	2.95	44
1994	2236	2.91	30
1995	2203	2.96	21

* Accidents treated at the company's medical department.
** Total number of accidents divided by the number of employees at the end of the year.
*** Lost Time Accidents are those where an employee loses at least one day's work as a result of industrial injury. The frequency rate is the number of Lost Time Accidents for every million man hours worked during the year.

Between 1991 and 1995, the total number of accidents fluctuated relatively moderately around a mean of 2205; with the exception of year 1991[8], the total number of accidents per employee also remained constant. In contrast, the LTA frequency rate, in other words, the rate of absenteeism through industrial injury which

[6] 'Employees Sustaining Injury at Work Policy', CarPress Ltd, 7.2.95.
[7] CarPress Accident Statistic Reports, 1991-1995.
[8] Due to the implementation of plant redundancies during 1991, the end of year employment figure used to calculate accidents per employee does not reflect total plant employment over the year. Although it cannot be accurately calculated, the true number of accidents per employee during 1991 is more in line with the constant rate over the following years.

CarPress was determined to reduce, declined by a dramatic 74%. Moreover, the company's personnel department confirmed that overall absenteeism also fell by 50%; from 12% in the late 1980s to around 6% in 1994.

These statistics, and the actions which prompted them, demonstrate that analyses which stress novel aspects of Japanese management practice, such as the disciplinary effect of peer pressure and management attempts to capture this to the benefit of the employer (Oliver and Wilkinson, 1992, p.309), sometimes miss the more significant impact of the conventional. As Edwards and Whitston (1993) discovered, there is little empirical evidence to support the idea of a move towards 'self-discipline' at the workplace. Instead, shop-floor discipline, order and attendance are currently maintained through a mix of measures, including, in the contemporary context of loose labour markets and weak trade unions, a return to more traditional, coercive forms of managerial authority.

EMPLOYEE INVOLVEMENT: MAINTAINING A DEFICIT IN WORKER PARTICIPATION

So far then, CarPress's HRM strategy, consisted of 'hard' measures aimed at building a more acquiescent, malleable and disciplined workforce. Even the benefit of improved job security came with a sting in the tail in the form of a relentless pressure and stress that accompanies labour intensification in the 1990s. However, in parallel with this approach, the company introduced ostensibly 'softer' socialization

techniques aimed at cementing a more durable form of control by incorporating the shop-floor into managerial doctrine. Essentially about building trust, acceptance and conformity, the impact of different employee involvement measures such as open communications and single status will now be considered.

The new communications

During the 1980s, the practice of direct communications between management and employees became increasingly common in British firms (IDS 1992a; Marchington et al. 1992; Townley 1989). Although the rationale for this was more complex than many business writers suggest (Townley 1989), things were more simple at Rover. Management perceived direct communications as the only way 'to win the hearts and minds of the men at all levels' and to bypass the company's more militant shop stewards (Edwardes 1983, p.87). Malcolm Edwardes instigated the practice of sending letters direct to employees homes and regularly issuing factory briefing sheets. Later in the decade, as part of its 'Working With Pride' programme, Rover introduced more refined techniques such as zone (team) briefings. However, as Smith (1988) discovered, the limited, top-down nature of the communications system soon engendered disillusion and disinterest on the shop-floor.

'Working With Pride' had perished by the time CarPress acquired the Llanelli plant. The new management's communications style was both ad hoc and minimalist. Team briefings became more infrequent, management cascades were only used in exceptional circumstances and company newsletters petered out; the notice board became the principal official means of communicating information whilst the

'grapevine' remained its most fruitful source. Although, by the time of the first questionnaire survey (October 1994), the company had re-introduced a site journal, 84% of employees indicated their dissatisfaction with company communications. This was not just a function of the paucity of information, it was also a consequence of a widespread distrust which some workers realised was inherent in British industry. A toolmaker typically commented:

> We get nothing from head office, they tell us nothing about how the company's doing, new investments and that sort of thing. And when they communicate at the local level, well, there's so much distrust, you just don't know whether the management are misleading you or not. Because at the moment, the way things are, what's always at the back of your mind when your local manager makes some announcement is that he's lying again.

And a cranedriver:

> I don't think there's any British company in this country which is really copying the Japanese. I mean, getting changes through that are pushed up from the bottom to the top. And I'm not blaming that on British workers. It's the fault of the middle and higher classes. They'll never change in this country...if anything, the best management communication policy for this bloody place would be distributing books on stress at work.

This antipathy to management was not a matter of lack of interest in the company per se, or in change at the workplace. After all, CarPress provided work and a livelihood; it established the context and organization for different activities which shaped the lives and identities of every one of its employees. Another driver reflected the position of many on the shop-floor in aspiring to become more involved, to utilise his skills and knowledge, to enrich his working life in ways which might form a radical

departure from the passive drudgery and discipline which accompanied direct management control over the capitalist labour process:

> I don't know anything about teamwork. The management here are shocking, they won't involve you with anything. As I see it you've got one team up there and one team down here. Okay, they might have all the qualifications going, you know, their 'O' levels, 'A' levels, degrees and the rest of it. But we've got our hands. It's hands that do the work in this place. We know how to make things in the plant, we know all about the problems you get with changing the jigs and tools. But they wouldn't dream of asking us. They're too scared too ask us for one thing, and in any case, they think they know it all.

During the war of attrition which preceded the shop-floor sackings in October 1994, CarPress realised that incorporating its senior stewards would enjoy limited success without also addressing independent rank and file militancy. It sought a more pervasive process of incorporation. Accordingly, management devised a new direct communications strategy of 'employee involvement' to complement the introduction of teamworking. It was implemented in the immediate aftermath of the sackings dispute.

Strategically planned monthly teambriefings formed the linchpin of the new policy. Every month, a sub-committee of the board, comprising representative directors and senior managers, drew up a cascade of company and customer information which would form the basis of team discussion. At each teambriefing, unit managers fed their teamworkers a wide range of company statistics and general information concerning: plant performance; plant profit levels; part reject rates; performance in fulfilling customer time delivery schedules; absenteeism rates; lost time accidents;

new projects; kaizen activity; and customer visits to the plant. The personnel manager also stressed that, 'employees are made particularly aware of the needs of the customer, of areas of work where CarPress is failing to meet the customer's needs, and it's possible consequences'. At the end of each presentation, time was set aside for questions and answers and shop-floor input.

The company also established Quarterly Business Reviews which provided the same type of information but in more depth. Forty individuals attended each review in a plush management presentation area. These comprised 20 permanent representatives from management, the unions and non-steward shop-floor workers, along with 20 different shop-floor and office volunteers.

The author visited CarPress a number of times during this period and encountered a quite profound transformation in the quality of public displays of information. Each team had its own large display board providing different team performance parameters; each provided photographs of team members and their task/NVQ credits[9]; the longer established teams even included birthdays and hobbies. The press and assembly shops also housed two much larger displays containing colourful

[9] The company's new shop-floor grading scheme corresponded with the operators' NVQ ratings. At the bottom end of the scheme, all Grade 4 operators (the majority) were assessed at NVQ Level 1 and at the top end, Grade 1 skilled workers were rated at NVQ Level 4. At the time of the research, the company had embarked upon a major investment in training its semi-skilled operators to NVQ Level 2. This involved limited technical skills training; it was more an exercise in changing attitudes. For example, different units covered customer supplier relations, involvement in communications, teamworking skills, presentational skills and 'self-analysis', 'a kind of continuous improvement of the self', as one NVQ Facilitator expressed it. In the second questionnaire survey (November 1995), only 10% of shop-floor respondents believed the NVQ programme was introduced to 'develop technical skills'; 13% felt it 'served no useful purpose at all'; 18% believed it was introduced to 'develop more positive attitudes to change at the workplace'; whilst 45% believed the programme was merely 'window dressing put on to impress the customer'.

graphical presentations of plant performance, absenteeism, defects, sales, and so on. In addition, the company began installing 'Toyota-style' overhead electronic displays of daily team performance.

Along with the plethora of posters and other displays urging maximum performance, ostensibly, this new approach to information management exemplified both strands of Townley's (1989) analysis of contemporary employee communication programmes: communication as a process of education and communication as a strategy of commitment. CarPress sought to dampen rank and file aspirations by inculcating a bit of 'economic reality' and understanding of market discipline; it also aimed to build greater employee commitment to corporate objectives in respect of company performance.

Analysing changes in the prominence of different sources of information at work provides one measure of the impact of the new policy. In both the 1994 questionnaire survey (which was completed immediately before the changes) and the 1995 survey (completed a year after), shop-floor and office workers were asked to select their three main sources of information concerning 'what is going on at work'. The results are summarised in Table 8.2.

Table 8.2, Three main sources of information at work, all employees
N = 384 (1994) and 514 (1995)

	PERCENTAGE OF RESPONDENTS CITING THIS SOURCE OF INFORMATION	
	1994	1995
Immediate supervisor	39	49
Team briefing	5	59
Quarterly Business Review	-	3
Company notice boards	44	28
Company newsletter	9	4
Trade union	47	30
The 'grapevine'	79	66
Other	5	3

Although the numbers relying on the grapevine remained high (and in most large social organizations this will always be the case) and the Quarterly Business Reviews made little impact, there were major shifts towards supervisors and team briefings as salient sources of information. At the same time, the relative impact of union communications substantially deteriorated, a decline which could also be attributed to the incorporation of a number of senior stewards.

However, what appears to the outsider as a considerable improvement in the quantitative and qualitative provision of company information may not be regarded in quite the same way by its recipients on the shop-floor. Many CarPress workers remained both frustrated and discontented. In the second questionnaire survey (November 1995), although 29% of shop-floor workers felt that company communications had improved, 35% believed they were no better whilst 36% felt they had actually deteriorated. In the same survey, 58% of shop-floor workers indicated that they did not believe most of the information they received from management. A

similar picture emerges when we look at the particular impact of team briefings. Table 8.3 summarises this for shop-floor workers.

Table 8.3, Shop-floor workers' replies to the question,
'What impact do you think your team briefings have had on the following:'
(Percentage by row; N = 471)

	INCREASED (%)	DECREASED (%)	NO CHANGE (%)
The amount of useful information you receive about the Company	41	7	52
Your understanding of management decisions	18	21	61
Your commitment to the company	25	11	64
Management's openness	13	32	55
Opportunities for you to have a say about what's going on at work	18	22	60

Although a substantial minority of respondents felt that team briefings improved the provision of useful company information, and a smaller minority believed they had increased their commitment to the company, the overall impact was negative. The already low levels of understanding of management decisions, of perceptions of management's openness and of opportunities to have a say about changes at work, all deteriorated further. One foreman, now unit manager, wryly admitted:

> Listen, these briefings are a fucking joke, even I'll admit to that. My manager gives me a written brief, I'll read out a load of figures and that's it, it's all over. Figures such as latest profits, sales, monthly defects and plant efficiency. All interesting stuff eh?

> When we started the briefings there was some interest from the boys at first. You'd get some sort of dialogue going. But that's because it was new. Now they're bored stiff with it. You read out your brief, look up, and you're confronted with a sea of blank, bored faces. Nobody ever asks you a question. But with these briefs, what do you expect?

Most CarPress workers, therefore, were not fooled by these new developments. Many had little time for a policy which under the benign designation of 'employee involvement' represented a distinctly 'top-down' approach to communications, a one-way transmission belt for both instilling a sense of discipline in production and promoting capitalist market ideology and the employer's interests . And they had little time for a mechanism which frustrated the propagation and advance of their own class interests.

Single status

The new working practices agreement committed CarPress to creating 'a single status company' where all distinctions between monthly staff and hourly paid employees would be ended. However, as the Personnel Manager admitted, 'this doesn't mean that we're going to get caught up with moving everyone up to the staff level...there's going to have to be compromises'. Indeed there were, for the concrete benefits of this commitment proved hard to identify. For example, a year after the new agreement was implemented, clocking distinctions between monthly and hourly paid employees remained, whilst the rationalisation of grades and the introduction of credit transfer did not prove particularly popular on the shop-floor. Neither did management's approach to the harmonisation of sick pay which insisted that shop-floor absenteeism fall below 4.5%, and remain there, before the operators could enjoy the same sick pay as their office colleagues.

CarPress was more interested in mobilising the idea of single status as an ideology of spurious benevolence rather than as a mechanism of reducing real class inequalities at the workplace. And in the context of antagonistic management-labour relations, the policy represented an extraordinarily weak facade for disguising the concrete manifestations of labour exploitation in capitalist production. This is exemplified by the Group Chairman's message to his employees in 1995[10]:

> My view of what a good company looks like is one - that attracts the best people; that pays the top rate for the job; that offers the best working conditions; where ***everyone*** is involved in achieving continuous improvement; where all stakeholders, employees, shareholders and customers are satisfied.
>
> For this, managers should not have the attitude of wanting the most out of employees for the least pay, nor should employees strive to get the maximum out of the company for the least effort. I see a future where harmony and consensus reign in an environment in which everybody wins. I want responsibility and authority devolved to the extent that ***everybody*** feels involved in the decision making process relative to their function in the company. Why shouldn't CarPress be like that?
>
> A better question is, which of us are going to actively work towards achieving this and which of us are going to obstruct the process? I ask every CarPress employee - which camp will ***you*** be in?

The second questionnaire survey (November 1995) reversed this assertive challenge by asking respondents whether managers and workers should be members of the same team, and secondly, whether they thought their own managers believed they were in a separate team to the workforce. The results are summarised in Table 8.4.

[10] Extract from 'The Chairman's Platform', CarPress Chronicle, Summer 1995.

Table 8.4, Shop-floor workers' assessment of managerial 'team spirit'
(Percentage by row; N = 471)

	AGREE (%)	DISAGREE (%)	UNDECIDED (%)
'I believe that all managers and employees should be members of the same "company team"'.			
All shop-floor workers	76	12	12
'I think that the management here believe they are in a separate team to the employees'.			
All shop-floor workers	88	5	7

The figures speak for themselves. Invariably, when the subject of single status was raised with shop-floor interviewees it would be met initially with a quizzical look, then amusement, then anger. When they eventually expressed themselves, these workers demanded far more substantial changes in both material and class relational terms than that provided by mere managerial platitudes or the superficial benefits of single status canteens, car-parks and the like. A cranedriver:

> All single status means for management is that I don't have to clock in and that type of thing. But does that make us all equal? Yeah, I understand the fact that you need leaders but if it's real single status then why can't we have the same money? If the general manager and the manufacturing manager, and the rest of 'em, didn't turn up for work today would the factory stop running? Of course it wouldn't. It would keep going. But it would stop like that if the shop-floor didn't turn up. It's the workforce who should have the top status here. And the management should come down to our status then they might see for themselves what we've been suffering over the years. No, the production workers are the real breadwinners for the company. All these others are just hangers-on and pussy cats.
>
> In any case, all this talk about single status it's a dream man, it's a dream! You don't think the Japs have got single status do you? All they've got is fucking canteens and uniforms. And they'll tell you that, "right lads we're all equal now!" But some people are more equal than others. Believe me, we need a revolution here. And it will come.

Many workers spoke in similarly trenchant terms about their aspirations for more dignity and equality at work. But aspirations they remained, for few believed that management at CarPress, or elsewhere for that matter, would be prepared to dilute its status, power and control. A woman from the assembly shop said, 'we should all be on the same rates and benefits, but if you're talking about getting rid of "us and them" I can tell you the "them" would never give up their status'; in the same vein, a foreman commented, 'I really think single status is an impossibility here. Our managers strive to become one of "them" rather than one of "us" and they'll defend it to their death'; and a toolmaker felt, 'there is, there's a definite class distinction here and in British industry generally. And I think over recent years the distinction's got worse, we've gone into reverse'.

Workers on the shop-floor, therefore, well understood the duplicitous nature of the single status rhetoric that has become fashionable in business circles. They recognised a confidence trick when they saw one. And on occasions they could also mobilise their collective humour to 'get even' with management. A press shop operator recounted a recent example of this:

> Single status? That's a laugh! Not so long ago we had a mass communications meeting with senior management about the introduction of the new agreement. After a while, one of the managers starts to talk about single status and he started everyone off sniggering. Then Mervyn, one of my mates on the next table, stands up and shouts, "I tell you what, if we've got single status coming here, you can take my Honda 50 and I'll have one of those management Rovers out there." We all roared with laughter at this and banged the tables and of course, the management quickly moved on to another subject. Angry they were too. But d'you see what I mean? Single status is one big joke in this factory.

Drawing together the 'egalitarianism' and 'equal involvement in decision making' commonly associated with single status, the 'participative workplace democracy' associated with the new communications policies and the 'self-management' of teamworking, CarPress's shop-floor workers were asked in both questionnaire surveys whether they felt they had 'enough say' in decisions made at work affecting different levels of the organization. In this way, the surveys provided a rudimentary indicator of the overall impact of the new employee involvement initiatives a year after their implementation. The results are summarised in Table 8.5.

Table 8.5, Shop-floor workers' assessment of employee involvement
Percentage by column; N = 316 (1994) and 471 (1995)

	PER CENT 1994	PER CENT 1995
'Enough say on decisions made about your own job and working conditions?'		
Yes	16	24
No	84	76
'Enough say on decisions made about the running of your department/section?'		
Yes	11	13
No	89	87
'Enough say on decisions made about the whole factory?'		
Yes	5	7
No	95	93

The results demonstrate the presence of a profound democratic deficit on the shop-floor of the 1990s. Workers' influence over changes to their own jobs and working conditions improved only moderately[11] ; their involvement in the decision-making process at the sectional level - which teamworking and the teambrief are supposed to

[11] Even this result was distorted by the length of service factor. In 1995, eighty percent of the majority group of workers with more than 10 years service indicated that they did not have enough say on decisions made about their own job and working conditions compared to 69% of workers with less than 5 years service.

especially enhance - remained abysmally low; whilst at the factory level it was almost non-existent.

These statistics should surprise nobody. The exigencies and driving logic and intensity of contemporary capitalist mass production do not provide sufficient margin for anything approaching meaningful worker autonomy. More than ever, CarPress workers remained subordinated to management, to the customer and to the machine. What is surprising is that some managers really believed that their programmes of specious employee involvement, of ideological control, would actually deceive their subordinates; some were even seduced by it themselves. But on the shop-floor, where only the hard experience of capitalist social relations counts, real 'empowerment', 'enrichment' and 'autonomy' remained both abstract and elusive.

TRUST, LOYALTY AND SHOP-FLOOR CULTURE

High-trust management-labour relations in contemporary capitalist production are assumed to arise from a post-Taylorist work organization which induces a new common purpose between managers and workers. Trust, loyalty and respect may then develop through the processes of joint-problem solving, sharing information and devolving discretion, responsibility and autonomy (Fox, 1985). To put this another way, 'a Taylorite factory deskills blue-collar workers and removes the need for trust; an un-Taylorite factory would tend to improve worker skills such that workers could be trusted with a higher degree of responsibility for both the design and

implementation of the production process' (Fukuyama, 1995, p.234). Unconsciously or not, these 'enlightened' managerialist writers use the same kind of arguments which, ironically, Frederick W. Taylor himself employed to support his vision of cooperative and participative employment relations in factories organised on scientific management principles (Bendix 1956). Taylor believed that low trust relations and antagonism in industry could be dissolved by securing a complete mental revolution on the part of both managers *and* workers: 'the great revolution that takes place in the mental attitude of the two parties under scientific management is that both sides take their eyes off the division of the surplus as the all important matter, and together turn their attention toward increasing the size of the surplus until this surplus becomes so large...that there is ample room for a large increase in wages for the workmen and an equally large increase in profits for the manufacturer' (Taylor 1947, cited in Bendix 1956, p.276).

Notwithstanding these ideological similarities, using the managerialist theses of Ohno (1988) and Womack et al. (1990), Fukuyama goes on to place his analysis into the context of Japanization. He argues that 'un-Taylorite' Japanese production methods, and in particular teamworking, are dependent on the commitment, participation and knowledge of the workforce and that the experience of working in teams itself engenders trust, loyalty and commitment. Thus, in Japanese lean production, we have a more 'humane, communal factory system'. Without digressing into the possibility that wider cultural and political supports may also determine worker commitment

(which in any case, some writers refute[12]), the main emphasis is placed upon the relationship between contemporary shifts in the nature of the capitalist labour process and shop-floor values.

At CarPress, although most individuals enjoyed little autonomy, they nevertheless worked in teams, they worked more flexibly and they were expected to use their initiative for the benefit of the company. The preceding four chapters have placed much emphasis upon the shop-floor's reaction against the consequent loss of traditional controls over the labour process. To what extent were these significant changes also accompanied by the emergence of new, more individualistic, even enterprise-based shop-floor values, built upon the trust that the business writers associate with teamwork?

To investigate this, the 1994 and 1995 questionnaire surveys asked shop-floor and office workers to select from a list of eleven options, three aspects of work which were most important to them and three which were least important. In both years, the majority of workers manifestly prioritised 'decent working conditions', 'good pay' and 'job security' as being most important, which is not in itself surprising. But they also shunned options more associated with the pro-company values of teamwork such as 'getting on well with supervision', 'plenty of overtime', 'good promotion

[12] As noted in Chapter One, Dohse et al. (1985) argue that the weakness of Japanese trade unions; the dependence of Japanese employees on a single employer; and their dependence on both the individualized wage system and the goodwill of the supervisor together constitute the more decisive factors in the 'committed worker' syndrome.

prospects', 'having responsibilities at work' and 'opportunity to use initiative'. The results are presented in Appendix B.

Both surveys also explored the question of trust. In 1994, respondents were asked whether or not they agreed with the statement that, 'the Company treats me with trust and respect'. Seventy one percent of shop-floor workers disagreed; 40% strongly disagreed. In the second survey, a year after the introduction of teamworking and the various accompanying instruments of ideological control, although the question was operationalised in a slightly different way, this low trust relationship clearly hardened; 89% of shop-floor workers indicated low levels of trust existing between managers and the workforce. The results of the second survey are displayed in Table 8.6.

Table 8.6, All employees' assessment of the level of trust existing between management and the workforce
(Percentage by row; N = 533)

	COMPLETE TRUST	TRUST MOST OF THE TIME	NOT MUCH TRUST	NO TRUST AT ALL
All Operators	2	9	35	54
Skilled Operators	1	1	40	58
Semiskilled Operators	2	12	34	52
Staff	2	23	56	19

Teamworking, the new communications, single status and other management initiatives together, therefore, failed to dent the traditional, low-trust values of instrumentalism on the shop-floor. Moreover, the cynical, but trenchant and emphatic worker denials of the notion that things could be different at CarPress suggested that the low-trust management-labour relations which accompany the intensification of labour exploitation in lean production would endure in the longer term. A press fitter typically commented, 'this factory is just a place of work, nothing more. It's just a

place where we happen to come into work and where management dictate to us all the time. You've got no rights here any more'. When asked about loyalty to the company, workers replied that the only loyalty they extended was their allegiance to the pay cheque every Thursday. And an assembly shop operator spoke for many when he replied:

> No, it's not the British way, it's not in our culture. And in any case, management here don't actually want loyalty. All they want is for us to work harder. It's the same old Tory philosophy: "if the rich man works harder pay him more, if the poor man works harder pay him less"...And I'm not loyal to this lot anyway. They seem like a bunch of crooks to me.

Even some of the more recent recruits felt the same way. A press shop operator:

> No mate, I'm telling you, there's been no change in attitudes here. It's as bad as ever. I've only been here for 2 years. I used to be keen when I started mind, I wanted to get on. But now I've learnt, what's the point? The company never invests in new machinery. These presses are 30 years old, they're clapped out. They're always breaking down. But the company doesn't care. As long as they're making money out of us, that's the only thing they care about. We can never make money out of them. No. I've had it up to here. My attitude now is "fuck the lot of 'em". Nowadays, every morning I just clock in, keep my head down and try and earn a wage. I don't think about the job, I just turn off. When my 8 hours are up I just clock off and go home.

If anything, these comments suggest a reinforcing of the instrumentalist base of worker 'commitment' with absolutely no evidence of the diffusion of 'pro-company' attitudes which many business writers tend to emphasise. However, other facets of traditional shop-floor values did change. This study emphasises the increasingly harsh nature of labour exploitation which was intrinsic to CarPress's implementation of

'Japanese-style' management initiatives in the 1990s. Nevertheless, in earlier times, stress, boredom and drudgery also characterised the labour process, despite the presence of local rank and file controls. But at least this human degradation was mitigated by a shop-floor culture which embraced the intimate values of mutual help, comradeship, warmth and crucially, humour. At various times, different workers provided their own fond anecdotes of manifestations of this. To provide just one example, Ieuan Thomas remembered the antics of one character in the assembly shop who came to be known as 'the Mohican':

> I remember, not long after I started in 1964, the metal finishers used to have their benches arranged in lines, row after row of them. And no kidding, at the end of every line, without exception, you'd have a foreman watching over you all the time. Real bowler-hatted stuff. There used to be hundreds of 'em. One man, I can't remember his name, he got really pissed off with this. One night, he went home and had the whole of his head shaved, except for a line down the middle. Just like a Mohican. The next day, he came in to work with a pick axe. Then, no word of a lie, he chopped up his bench into firewood with his axe, put the wood into a neat pile and, no kidding, he stripped off bollock naked, lit the wood and danced around the fire waving his pick axe around like a spear. And he was chanting, "too many chiefs, not enough Indians! too many chiefs not enough Indians!"
>
> We couldn't believe it. We just stood there laughing our heads off. Next thing, the superintendent comes along and screams, "fuck me, what's wrong with him? Someone take him away!" So they did. He ended up in a mental hospital for a couple of days for observation! Mind you, he was soon back at work.

Here was an idiosyncratic form of resistance to management control which embodied a distinctively working class comic humour. One difference between life on the shop-floor during this era and the present is that contemporary management will no longer tolerate any form of worker insubordination, irrespective of the shape in which it

comes. And in particular, it will not tolerate insubordination that questions the method of operation or rationale of capitalist mass production. The new management techniques, therefore, do not allow for 'Mohicans' or other manifestations of working class opposition. Neither do they respect the humanitarian values of working class solidarity. At the end of one interview, Annette, a woman from 'Bosnia', delivered the following parting shot of dejection:

> The way things have turned out here now, this continual fear for your job, it's resulted in a situation where we're all competing against one another. We're all saying, "yeah, I could do this job, I could do that job". But there's no longer any consideration for others. What about those who can't do the hard jobs anymore, those who can't keep up with the speed and the pressure? In the old days we'd help them out but I'm afraid it's not like that anymore. The company has made sure that we're all on our own, that we're by ourselves. There's just no togetherness anymore.
>
> This factory used to be a happier place. There used to be a time when we all mucked in and helped each other out. But now we're all forced to rush our own jobs. We rush every job. And some men are struggling with nobody there to help them anymore. Personally, I try to help people out, I'm still striving to get this better atmosphere but to tell you the truth it's all gone. Most people in this factory now hate the place. They come in for the money and get out as soon as they can.

This poignant commentary on the shifting nature of shop-floor social relations in the 1990s injects a final human element into this chapter's analysis of the different management techniques that may be employed to build new corporate cultures of cooperation and market awareness. Like many of the Japanese transplants in South Wales, CarPress was not so much interested in quixotic notions of 'worker loyalty' and 'total commitment to the firm' but more in securing personal responsibility, personal discipline and a sense of obligation to production, the market and the

customer. The case study demonstrates that in fact, a pervasive mood of compulsion and fear on the shop-floor can drive these sentiments rather than any sense of true commitment.

Moreover, as a number of the above comments testify, the same pressures are forcing workers to substitute the principle of individualistic self-protection for the ethic of mutual support. This raises the possibility that although shop-floor instrumentalism remains dominant, other aspects of the customary 'factory-class consciousness' are now under threat. In a penetrating climate of fear, and a wider economic and political environment which itself critically undercuts effective rank and file resistance, the imposition of managerial and customer prerogatives - aimed at maximising surplus extraction and capital accumulation - is acting to pervert the virtue and integrity of traditional shop-floor solidarity. The process that we call 'Japanization', therefore, impairs not just the material condition and collective strength of those who labour but also their human spirit.

CHAPTER NINE

CONCLUSION

Throughout most of this thesis, the analysis has investigated the impact of Japanese-style management innovations on the interests of shop-floor labour. The author makes no apology for this. Industrial sociology is becoming consumed by managerial questions; for example, the extent to which new management techniques in the UK are different from old management techniques; or different from practice in Japan and other competing capitalist economies; or, whether the emerging restructured work organizations are fully functional, part-functional or dysfunctional. Such a managerial bias is a corollary of the academic world's current tendency to exclude labour from society. The notion that a fundamental conflict of interests between capital and labour remains central to the organization of work in the factories of the 1990s has succumbed to the new egalitarian ideology of 'empowerment'. Consequently, both the articulation of separate class interests and the mobilisation of working class resistance in its various collective and individual forms are no longer subjects of interest. Where the standpoint of labour is considered it is more often placed into an analytical framework of advanced modernity rather than advanced capitalism; here, subjectivity and conflicts over individual identity count for more than conventional resistance against a subordinating capitalist class.

In contrast, this thesis demonstrates that by putting labour back into industrial sociology and recognising that the essential conditions for resistance and misbehaviour are still present at the workplace (Thompson and Ackroyd, 1995, p.629), we find that the 'Japanization of British industry' is not unproblematic. If the new management initiatives constitute rational capitalist attempts to intensify rates of labour exploitation then we must expect worker resistance, including traditional collective forms.

Analysts who are primarily interested in management systems and organization theory would discover much material in Parts One and Two of the thesis to reject the universalistic, paradigmatic approach to Japanization followed by many business school writers. Pure JIT/TQM/HRM ideal types have no factual basis because, *inter alia*, the existence of different corporate logics, different sectoral traditions, different technological constraints, different product markets, different labour markets and different industrial relations traditions together produce diverse, often more mundane work organizational outcomes. However, when the management innovations are looked at from the standpoint of the many individuals who bring their labour power to the shop-floor of Japanising factories, then taken together, the transplant survey and case study data reveal a more uniform, significant, and indeed, pernicious series of changes. In particular, once the impact on labour's *interests* becomes the focal point of the analysis, then a marked congruence emerges between the different management practices, modes of work organization and human resource management strategies followed in both the Japanese transplants in South Wales and in CarPress.

Operating within an economic environment of intense competitive pressure, the managers of lean mass production in these firms were not particularly interested in enriching the lives of their employees; during many discussions with the author on this subject they regarded the notion that assembly line workers could enjoy meaningful 'empowerment' and 'self-management' as both incomprehensible and bizarre. Their labour control priorities were somewhat more mundane than this, reflecting the timeless capitalist exigencies of efficient surplus extraction and capital accumulation. But from the workers' perspective, these priorities represented a fundamental threat to traditional forms of rank and file control and shop-floor autonomy. It is in relation to this order of change that a 'model' of Japanese practice begins to emerge. This is summarised in Table 9.1.

Whether organised on the basis of cells, teams or conventional long assembly lines, the work of most production operators was intense, limited in skill, and lacking in autonomy. The gradual dismantling of rank and file controls over the labour process in the British case study, and their suppression in the greenfield Japanese transplants, imposed stricter managerial prerogatives and a more flexible and productive consumption of labour power. And this distinctively disciplined approach to production was matched in the ideological sphere. The different firms in this study displayed little interest in cultivating new, innovative and enterprising workforce attitudes. Instead, they sought to instil something more prosaic but fundamental to the needs of the 'capitalist spirit'. That is, a sense of responsibility in production and accountability to the customer, and this, as a stark substitute for those facets of working class loyalty and solidarity which threaten capitalist interests.

Table 9.1, A 'Japanese model' of labour control in South Wales

ORGANIZATION OF THE LABOUR PROCESS
Lean Production Control: workers more completely subordinated to the machine and to the intensive pace of production by reducing production line buffers, stocks and work-in-progress; by more accurately synchronizing output with customer demand; and by the maintenance of strict bell to bell working.
Labour Flexibility and Teamworking: labour utilization maximised and idle time minimised by dismantling/prohibiting traditional job and skill demarcations; maintaining a fragmentation of tasks; and enlarging jobs by task accretion, either within team organization, or by management-controlled flexibility on conventional assembly lines.
Worker Accountability and Teams: workers organized into 'teams' or groups to create manageable units for accountability to both management and the customer.
Industrial Engineering: trade union and rank and file influence over the processes of job design and work measurement eradicated.
Supervisory Control: strict, close supervision of the production worker, and where appropriate, direct customer surveillance.
Continuous Improvement: labour productivity systematically raised by operating strictly management-controlled kaizen schemes with limited worker participation.
SOCIALISATION PROCESS
Employee Recruitment: exploitation of sophisticated recruitment techniques and/or temporary labour to build workforces sufficiently malleable to meet the strict demands of lean production.
Job Security: job security philosophies - rather than guarantees - offered in return for worker cooperation and compliance. Job security for core workforces maintained on the basis of lean manning; labour intensification; reduced absenteeism by attacking workers' sick leave rights; extended working hours for core workforces; and perpetual job insecurity for temporary workers.
Direct Communications: unidirectional employee communications techniques used to undermine independent trade union information; to instil an understanding of economic and market discipline; and to develop employee commitment to corporate objectives.
Single Status and Equal Opportunity Policies: used to promote corporate egalitarian ideology rather than address concrete inequalities at the workplace.
Industrial Relations Policy: promoting non-adversarial industrial relations by subverting conventional trade union democracy. Involves incorporating trade union officials and shop stewards within company councils or more informal bargaining arrangements; and both fragmenting rank and file resistance and weakening traditional values of shop-floor solidarity.

This uniformity of practice did not emerge naturally or by accident. A number of different catalysts and forces came into play to connect the process of change at CarPress with the various labour control techniques operating in the Japanese transplants both in South Wales and elsewhere in the UK.

The first of these is the effect of the sheer density of Japanese transplant activity in South Wales. Although only one firm operated in the same sector as CarPress, the collective presence of so many salient factories - a good number of them large employers - in such a relatively small industrial area impacted upon the consciousness of management. And particular local activities and encounters strengthened this. For example, the Welsh Development Agency, different Training and Enterprise Councils, different Chambers of Commerce and other similar agencies regularly organise seminars, conferences and more informal meetings which bring together managers in Japanese and British plants with the explicit purpose of facilitating the diffusion of ideas.

Moreover, this contact, in a region of high unemployment, which plays on the fears of managers as well as workers, heightens the ideological threat of Japanese competition. Many writers emphasise the symbolic significance of the Japanese model in Britain which managements often mobilise against workers in pursuance of traditional agendas of labour intensification (Elger and Smith 1994b). Notions of 'the Japanese productivity miracle' and 'factory survival' are central here. But perceptions of Japanese superiority also impact upon managerial consciousness and social action, to the extent that, as we saw in Chapter Four, many CarPress managers genuinely

believed that a more fundamental restructuring of shop-floor work organization and social relations was necessary if their factory was to successfully compete.

The intensity of market competition, on a global scale, is therefore central here. The new relationships between Japanese 'customer' assemblers and their suppliers in particular product markets constitutes an important facet of this. The de-industrialisation of the British economy over the past two decades has left surviving British suppliers in cars, electronics and other sectors, desperate for new contracts with the incoming inward investors. So desperate, in fact, that they are forced to concede to Japanese transplant management, influence and direct intervention over their labour costs and labour control strategies. As we saw in Chapters Four to Seven, this 'rule of the customer' had a profound impact on both the reorganisation of work at CarPress and the shop-floor's ability to resist this. It also of course increases the density of interaction between managers in British component suppliers and Japanese assemblers, a factor which helps sustain the process of change.

Lastly, the distinctive contemporary economic and political environment oils the wheels of the diffusion process in a number of ways. The introduction, into a brownfield, unionised car plant, of many aspects of the new labour control and exploitation policies described throughout this thesis would have been unthinkable twenty years ago. During the 1970s, organised labour in British industry was not in a position of control, despite the alarm and foreboding of many right wing political commentators at the time of the 1979 General Election. However, the balance of class forces was more in its favour at that time than at any subsequent period. Indeed,

during the 1980s and 90s, the cumulative effect of de-industrialisation, mass unemployment, anti-trade union legislation, and the high profile defeats of such seemingly invincible groups of workers as miners, shipbuilders, steelworkers, carworkers, dockers and printers, has left an indelible mark on the spirit of resistance of British workers. In this context, many British managers have acquired sufficient confidence to effect a restructuring of work which significantly shifts the frontier of control on the shop-floor in capital's favour.

The British state has also played a more particular and interventionist role here, despite the laissez faire ideology of successive Conservative Governments. As we noted in Chapter Four, at the regional level the Welsh Development Agency now acts both as broker in matching British suppliers to different inward investors and as management consultant in helping the former introduce acceptable working practices. At the national level, the state has offered substantial financial incentives to Japanese firms who locate in the UK. Hiding under the benign cloak of dynamic 'job creation', the Thatcher regime of the 1980s was more interested in using Japanese inward investors to catalyse significant changes in British industrial relations. Thus, mobilising the symbolism of the no-strike deal, and the dominant perception of consensus-based relationships between workers and managers in Japanese firms, the Conservatives sought to decisively weaken the bargaining power of British unions by explicitly supporting Japanese enterprise unionism (McIlroy 1988).

It has become fashionable in the 'post-labour' labour process debate to de-emphasise and even marginalise the different strategies of managerial control over labour power.

As Thompson (1989, pp.231-234) has observed, some writers reject the privileged moment of extraction of surplus value in the circuit of capital, whilst others question the idea of control strategy completely, stressing instead the salience of managerial contradictions, complex contingencies and 'negotiated preferences'. This author's analysis of both management practice in Japanese transplants and the political process of change at CarPress demonstrates that such postmodern obfuscation and obsession with appearances should be disregarded. When asked the appropriate questions, the managers at CarPress enunciated an explicit discourse of labour control. They talked incessantly of their inability to shape and control the views of older workers; they became obsessed with undermining traditional rank and file controls over labour allocation and the pace of work; they wistfully reflected upon the efficacy of Japanese control strategies on greenfield sites; their constant fear of losing control determined their exclusion of the principle of self-management from the practice of teamworking; their fear of losing control also determined their rejection of full worker participation in kaizen; the introduction of bell to bell working constituted an emphatic direct control over workers' time; their new industrial relations policies embodied their resolution to dissipate rank and file control; and their various socialisation practices were aimed at cementing a more endurable labour control. Managerial social action was saturated in the politics of control.

Of course, this was not control for its own sake. As Thompson points out, those who criticise the emphasis upon control confuse 'the *goals* of firms and managers with the *means* of achieving them. Control is seldom relevant to the former, but essential to the latter' (1989, p.234). Thus, at CarPress, and in the Japanese transplants, different

techniques of control over labour power merely ensured a more efficient process of surplus extraction and capital accumulation.

The model of labour control summarised in Table 9.1 is notable for the comprehensive repertoire of techniques applied at the point of production. However, external forces are also important here. Just as economic and political developments facilitated the introduction of these measures, they also help sustain their effective operation. Indeed, as we shall now discuss, once the politico-economic elements of both the state and the rights of the consumer are incorporated into the analysis then these Japanese and 'Japanised' management regimes take on distinctly hegemonic characteristics.

Burawoy (1985) periodizes developments in the process of capitalist production on the basis of changes in the political apparatuses of production, that is, the shifting role of the state in reproducing the social relations of the labour process through the regulation of struggles. This periodization comprises three phases: despotic regimes; hegemonic regimes; and hegemonic despotism.

In the first phase, Marx's (1976) conceptualisation of factory despotism, under which workers are subordinated to the merciless dictates of the foreman and the machine, is supplemented by the dull force of economic compulsion - the worker's dependence on cash earnings for a livelihood. This 'market despotism' was, therefore, a wholly coercive system of labour exploitation. In the face of crises of underconsumption and periodic worker resistance it gave way to the second phase of the hegemonic regime in

which the mobilisation of the labourer's consent to continuing exploitation prevailed over coercion. Here, two forms of state intervention broke the ties binding the reproduction of labour power to productive activity in the workplace. Firstly, social insurance legislation provided workers with a guaranteed minimum income independent of their participation in production. Secondly, the state placed limits on managerial domination and coercion by establishing a legal framework of workers' rights. Burawoy argues that in these new conditions, management could no longer rely on the economic whip of the market to sustain factory discipline, instead, 'workers must be persuaded to cooperate with management. Their interests must be coordinated with those of capital' (1985, p.126).

Burawoy characterises contemporary developments in capitalist production in terms of a transition to hegemonic despotism. According to this analysis, the state regulation of factory conflict in a context of global capitalism eventually laid the basis for a further crisis of profitability. The emergence of new, coercive factory regimes in semi-peripheral regions of the global economy exposed the costs and rigidities of Western hegemonic regimes. At the same time, Western multinational companies could more easily exploit the large pools of cheap, malleable labour in both peripheral countries and peripheral regions in the advanced countries. These global operations became possible because the fragmented labour process can now be effectively coordinated and re-integrated by exploiting advanced transport and communications technologies. Burawoy argues that, as a result of these structural changes, worker consent under hegemonic regimes gives way to the coercive pressures of hegemonic despotism. The tying of workers' interests to the survival of their factories leaves

them defenceless against the new challenge of global capital. Workers are forced to make concessions on wages and employment conditions in order to maintain relative plant profitability and to limit the possibility of a transfer of operations. Thus, the new hegemonic despotism is 'the "rational" tyranny of capital mobility over the *collective* worker....The fear of being fired is replaced by the fear of capital flight, plant closure, transfer of operations, and plant disinvestment' (1985, p.150).

The interaction between the political apparatus, market relations and the Japanese control techniques outlined in Table 9.1, established a distinctive variant of this new despotism in the factories of South Wales. During the 1980s and 90s, the state enforced a series of policies which together established a quite pervasive and coercive climate of fear. Workers' rights came under a ruthless assault from successive Conservative regimes. Effective minimum wage provisions in the form of Wage Council settlements, unemployment benefits, social security benefits, strike benefits and so on, were either discontinued or significantly cut back. For many workers, such employment protection rights as safeguards against unfair dismissal and victimisation also disappeared. At the same time, as the events described in Chapter Seven exemplify, the Government significantly undermined trade union rights and immunities. And both capital and the state used the new anti-union legislation to prosecute a number of significant victories against some of Britain's most powerful unions.

The state also played a central role in both creating and sustaining mass unemployment throughout most of this period. In South Wales, as we saw in the last

chapter, employers are able to adroitly exploit large pools of young, more acquiescent workers both to manage their new lean manning strategies and to weaken traditional shop-floor solidarity.

These quite profound state interventions partly repaired the ties which bound the reproduction of labour power to the labour process under market despotism. However, a new development in the form of close, 'cooperative' customer-supplier relations has added a further twist to this picture of market coercion at the workplace. Burawoy's conceptualisation of hegemonic despotism emphasises the ability of footloose global capital to sap the confidence and weaken the resistance of collective labour. In contrast to this, although the outcome is the same, different capitals in the lean production chain are now quite prepared to commit themselves to their suppliers and customers - and to their workers and local communities - on a long term basis. But this commitment only stands provided their workforces are also prepared to submit themselves to the dictates of market relations *within* production. That is, as we have seen in various parts of this thesis, those workers who resist in the supplier factories of lean production may soon find themselves subject to the job threatening interventions of the customer. And many of those who labour within the final assembler in the production chain are also subject to the dictates of the consumer as embodied in the unrelenting pressure of just-in-time assembly.

We have arrived, therefore, at a 'Japanese model' of labour regulation in South Wales bolstered by distinctive politico-economic conditions which critically constrain labour resistance. It constitutes a particularly coercive form of hegemonic despotism which

sits in stark contrast to the spurious business ideologies of worker empowerment and autonomy. However, this author is not suggesting that these developments in coercion and control have effectively banished resistance from the shop-floor of the 1990s. The case study material in Chapters Four to Eight provided a wealth of evidence of the tenacity of different forms of worker opposition to the process of 'Japanization'. And although the CarPress management eventually succeeded in putting into place its work organizational controls by mercilessly sacking workers and thereby defeating general rank and file opposition, the resulting shop-floor defeatism did not translate into total submission. If the introduction of new management techniques is a function of the dynamic of class struggle then so is their continuing application. As Holloway comments on the 'new reality' of the car industry epitomised by Nissan in Sunderland, 'but for capital, the struggle to subjugate and exploit labour is endless. And oppression by capital daily meets resistance from labour. The world of Nissan is suffocating, but occasionally a scream of protest breaks the silence' (1987, p.163).

At such brownfield plants as CarPress, the organization of 'screams of protest' remains central to the politics of production. Six months after the process of sackings and shop-floor demoralisation described in Chapter Seven, the CarPress management attempted to implement a pay deal which involved a minimal pay rise, a worsening of the hourly paid sick pay scheme and a withdrawal of the unions' temporary workers agreement. The rank and file rejected this in a secret ballot by 22 to 1 and, against their shop stewards' recommendations, voted by 4 to 1 for a strike ballot. In customary fashion the management then threatened to close the plant and sack the first person to go on strike. After regional union officers beseeched the membership to

back down - again in customary fashion - the members voted narrowly against a strike.

The significant point here is that despite their despondency, despite their lack of effective leadership, and despite their knowledge that management was likely to win this particular fight, these shop-floor workers were still prepared to display overt defiance. Their actions demonstrate that although the process that we call 'Japanization' in capitalist production exacts from labour a more complete subordination to management and, through this, an intensification of its exploitation, this new despotism still cannot suppress the worker resistance and conflict which remain inherent to the capitalist labour process. The dynamic of class struggle in capitalist factory organization - including too, struggle initiated from above - ensures that the restructuring of work and employment relations will always be problematic. And it follows that the process of change will be subject to more fundamental tensions, inner contradictions and open conflict once the current imbalance of class forces begins to move in the opposite direction.

APPENDIX A

RESEARCH METHODOLOGY

The thesis analyses the process of 'Japanization' at work by exploring the connections between distinctive managerial innovations in South Wales-based Japanese manufacturing transplants and the impact of similar innovations within an emulating British firm. As made clear in Chapter One, in order to redress the current bias in industrial sociology towards managerial concerns it places particular emphasis upon the impact of workplace restructuring on factory workers.

In order to operationalise this, the research design was divided into three phases, which although discrete, involved some overlap in time periods:

- Initial exploratory phase (November 1993-January 1994)
- Survey of Japanese transplants (January-June 1994).
- The CarPress case study (January 1994-November 1995).

The methodologies employed for each of these will now be described in detail.

1. Initial exploratory phase

This initial phase had two objectives. Firstly, interviews were sought with representatives of different state and industrial agencies in South Wales in order to build a rudimentary industrial profile of the region; to procure their views on the impact of Japanese Foreign Direct Investment; and to gain an understanding of the roles of the different agencies in the change process. Secondly, interviewees were asked to discuss their own experience of dealing with particular Japanese transplants and emulating British firms. Through this, the author gained an appreciation of the problems of access; a recognition of the most appropriate firms to approach; and an initial ad hoc list of individual contacts within these firms.

Interviews were carried out with senior managers and directors from the following organizations. Each lasted 2 hours on average, the total interviewing time amounting to 23 hours in all.

The Welsh Office, Industry Department, Cardiff
The Welsh Development Agency (WDA), Economic Office, Cardiff
The Welsh Development Agency, Source Wales, Treforest
The West Wales Training and Enterprise Council (TEC), Swansea
Welsh Glamorgan County Council, Economic Development Unit, Swansea
Wales Chamber of Commerce, Cardiff
Newport and Gwent Chamber of Commerce, Newport
Swansea Chamber of Commerce, Swansea
The Confederation of British Industry (CBI), Cardiff
Engineering Employers (Western Association), Treforest

2. Survey of Japanese transplants

This phase of the research aimed to establish the nature of any distinctive managerial innovations in the organization of the labour process and employment relations in Japanese transplants operating in South Wales. It therefore depended on the survey method. To effect this, basic information on all Japanese transplants employing more than 25 workers was collected from different local authority contacts and academic reports[1]. Letters were then sent to senior managers within the 17 Japanese firms so identified, summarising the objectives of the research and requesting interviews.

In response to these, I received four letters of rejection - for the reason that Japanese firms are habitually flooded with interview requests from different academics and students - whilst the remaining 13 firms appeared to ignore my correspondence completely. From this point on, gaining access became a question of perseverance, pleading and nuisance-making. Fresh letters were sent to each firm and 'gatekeepers' were literally bombarded with telephone calls every week until the different plant managers could be persuaded to speak to me.

As a result of this arduous process, 15 of the 17 firms approached eventually agreed to participate in the survey. Of these 15 firms, 10 consented to plant visits, interviews with managers and shop-floor observations which in some cases involved whole day visits, and in the case of Calsonic, extended to four days. The remaining 5 firms

[1] Of particular use here were Morris, Munday and Wilkinson (1992) and Munday (1990).

would only agree to complete a basic questionnaire[2] followed up by extended telephone interviews. This unequal access was an inevitable function of the 'closed access' nature of some of these firms[3]. Indeed, a number of managers expressed the view that whilst their employers wished to offer general support to their local communities, for the academic world this only extended to those researchers who generally supported the objectives of Japanese management. Therefore, more critical sociologists had to display a good measure of social sensitivity and tact - in terms of both dress and discourse - in order to gain even the more limited access required by the survey method.

In all, 18 managers were interviewed for, on average, two hours each. The total time expended on interviewing amounted to 39 hours with many additional hours used for factory observations. Interviewees comprised: 11 Human Resource Managers; a Deputy Managing Director; a Site Manager; a TQM manager; a Product Assurance Manager; a Production Control Manager, a Finance Manager; and a Manufacturing Manager. In addition, interviews were carried out with the GMB Regional Secretary for South Wales, who was responsible for trade union members at AIWA, Diaplastics, Matsushita Electric and Star Micronics, and with a group of GMB shop stewards. A two hour session with the General Secretary of the Welsh TUC was also incorporated into the survey's examination of new industrial relations strategies.

[2] This questionnaire is reproduced in Appendix C.

[3] Hornsby-Smith describes 'closed access' groups as those 'able to erect discouraging barriers against the intrusive outsider or, in some other way, to achieve invisibility and evade detection' (1993, p.53).

Each interview was structured around a standard schedule. This covered the following basic questions: products and product markets; factory output figures; workforce profiles, including employment of temporary labour; and hours worked, overtime and shift systems. It then moved on to particular aspects of work organization and employment relations: shop-floor labour processes; nature of technologies employed; production control systems; labour deployment and flexibility practices; TQM practices; employee recruitment techniques; equal opportunity policies; job security policies; employee communications; single status policies; pay, job grading and job evaluation policies; training policies; and industrial relations issues.

Once these data were collected, the interviews became more semi-structured, allowing participants to express their views and ideas more freely. In this way, in contrast to the conventional, highly structured quantitative survey method, the investigation also incorporated a more in-depth, qualitative approach to data accumulation.

The following Japanese firms participated in the survey:

Calsonic Radiators Ltd., Llanelli
Aiwa (UK) Ltd., Newbridge, Gwent
Matsushita Electric (UK) Ltd., Cardiff
Sony Manufacturing (UK) Ltd., Pencoed, Bridgend
Gooding Sanken Ltd., Abercynon
Electronic Harnesses (UK) Ltd., Llantrisant
Yuasa Batteries (UK) Ltd., Ebbw Vale
Matsushita Electronic Components (UK) Ltd., Port Talbot

Matsushita Electronic Magnetron Corporation (UK) Ltd., Cwmbran
Sekisui (UK) Ltd., Merthyr Tydfil
Dynic (UK) Ltd., Cardiff
Diaplastics (UK) Ltd., Bridgend
Takiron (UK) Ltd., Newport
Star Micronics Manufacturing (UK) Ltd., Tredegar, Gwent
Hitachi Consumer Products (UK) Ltd., Aberdare

3. The CarPress case study

The final - and longest - phase of the research sought to analyse the implementation of different Japanese-style labour regulation practices at the British case study, CarPress, and the impact of this process upon different workers. This involved monitoring developments at the company's Llanelli factory over a period of nearly two years.

Gaining access to the factory during the critical period of the change process was a combination of chance, good luck and research planning. I first entered the plant in November 1993, when, along with a small group of local journalists, industrialists, academics and students, I was given a 2 hour tour of the shop-floor, as part of Llanelli Borough Council's 'Industry Week' promotion. At the end of the tour I managed to spend a few minutes with one of the plant's production managers and persuaded him to grant me an interview in the new year. After this meeting - and a second factory tour - in January 1994, the company allowed me to return in February and spend a day with its Toyota cell, observing the various labour processes and interviewing different production operators and superintendents. It was at this point, following a fairly

heated debate with one of the plant's senior shop stewards - who regarded any research into new working practices as a potential threat to shop-floor opposition - that I became convinced that the factory represented potentially valuable case study material.

Accordingly, after securing the agreement of my production manager contact, I submitted a formal proposal to research the attitudes of CarPress's shop-floor and office workers towards such new working practices as labour flexibility, teamworking, and kaizen. My hopes appeared to be dashed when two weeks later my contact suddenly left the company. However, early in March, I received a telephone call from the factory's Personnel Manager requesting an urgent meeting. Here, I was informed that as a result of a recent Rover RG2000 quality audit[4], CarPress had been instructed to carry out a workforce attitude survey along similar lines to my research proposal. In return for accomplishing this for the company I was offered unhindered access to all areas of the factory for the purposes of carrying out my own research. I then visited the plant a number of times in the spring of 1994 to interview managers and shop stewards and carry out documentary research, a process which culminated in three separate and formal presentations of the research programme to the plant's senior directors, its middle management and its senior shop stewards and office representatives.

[4] See Chapter Four for further details of the impact on autocomponent suppliers of the Rover RG2000 auditing system.

My hopes were again dashed in early May, when, two days before the attitude survey was due to commence, I received a telephone call from the CarPress Personnel Manager informing me of a postponement due to a shop-floor industrial dispute over the company's new working practices proposals. As a result, the process of interviewing a cross section of employees and surveying the whole workforce did not start until September 1994.

Many interviews and shop-floor observations took place between September and December 1994. Further groups of workers were interviewed on certain days during the following year, culminating in a second survey of the workforce in November 1995. I also paid separate visits to the sacked union convenor, Ieuan Thomas (a pseudonym), during 1994 and 1995 for the purposes of both semi-structured interviewing and informal discussions.

Nearly 150 shop-floor workers, office workers and managers were interviewed in total. These comprised company directors; senior managers; line managers; production superintendents and foremen; production operators; toolmakers; press setters and fitters; electrical and mechanical maintenance fitters; project engineers; tooling engineers; industrial engineers; a robotics engineer; a CAD engineer; different quality assurance personnel; different administrative and clerical staff; senior shop stewards; staff union representatives; health and safety representatives; and the site safety officer.

I prepared 16 different interview schedules appertaining to the various functions and jobs involved. All schedules raised the issues of teamworking; labour flexibility; bell to bell working; labour intensification; kaizen and other TQM practices; company communications; single status and equal opportunity policy; company loyalty; and industrial relations. They also contained a number of prompts to initiate discussions about job satisfaction; job security; the impact of unemployment; the impact of Japanese firms in South Wales; and finally, the extent to which both the job and CarPress had changed over the years. Additional questions varied in accordance with the nature of the interviewee's occupation. For example, industrial engineers were asked a series of questions on the nature of workstudy in the 1990s; foremen were prompted to discuss the problems of policing bell to bell working; and so on.

Both the management and the Joint Shop Steward's Committee refused to allow me to tape interviews for fear of causing a general walk-out on the shop-floor. I therefore had to minute each interview by taking detailed notes. Apart from this, full facilities were provided in terms of time off for interviewees and secluded interview rooms where individuals could talk openly and freely. Some employees were interviewed in small groups, some in pairs and others singly. The interviewing process was long and arduous; a typical day comprised continual interviewing on the shop-floor between 8.00am and 3.30 pm followed by sessions with management between 3.30pm and 6.00pm. When I returned to my bed and breakfast accommodation I would then relive each day by dictating my notes and personal reflections onto tape, a process which occupied most of the evening.

However, this part of the research was relatively trouble-free compared to the execution of the two workforce surveys. Part Two of this thesis describes how, in various ways, fear and managerial coercion accompanied the process of change at CarPress. It also describes how the introduction of new working practices was subject to intense hostility and shop-floor resistance. The provision of unhindered access to the factory in these circumstances constituted a rare opportunity to research the complex politics of class struggle at the point of production. Nevertheless, these were not the most propitious conditions for carrying out such practical research tasks as distributing and collecting questionnaire forms. As many workers indignantly protested, they were not numbers to be quantified by company accountants - or social researchers; they were human beings.

The first questionnaire survey was accomplished during October 1994. The original research design - endorsed by CarPress - required the distribution of questionnaires by myself and shop-stewards to a controlled sample of between 300 to 500 employees. The management confirmed a number of times that participants would be granted time off from work to complete the forms. In the event, on the planned day of distribution, the company reversed its decision and insisted that employees complete the questionnaires in their own time. It also insisted that all employees receive a form. Consequently, it arranged to distribute 700 questionnaires attached to wage slips on October 12th. I was also forced to concede the extension of the collection process to a 5 day period, during which time participants would voluntarily place their completed forms into one of nine union ballot boxes placed at various locations in the factory.

The outcome was predictable. Although the senior stewards spent some time urging their members to complete the forms, few initially did so. Many individuals took their forms home and just forgot about them. The nightshift appeared to take an informal collective decision to boycott the survey completely. I took sole responsibility for the keys to the ballot boxes. The wages department confirmed that 651 questionnaires were eventually distributed because of a 7% absenteeism rate that particular pay day. At the end of the first day of the survey, just 96 forms were placed into the boxes, a response rate of 13%. At the end of the second day - after the nightshift had received their forms - the figure remained unchanged. By the end of the 5 day period, a total of 112 forms were collected; not one was received from production workers on the nightshift.

I then decided to take matters into my own hands by embarking on a three day tour of the production dayshift, walking from machine to machine and pleading with each operator to trust me and complete the form. As a result of this, the number of responses increased to 249, a response rate of 38%. The many conversations with operators during this process of persuasion also exposed how the low response rate was a function of the pervasive climate of fear - rather than apathy - on the shop-floor. Despite my insistence that I would be the only individual to read and analyse the questionnaires, few workers believed me. The following two comments were typical:

> It's obvious. You don't think we're stupid do you? The management have got the keys to the boxes and they go around at night emptying them and reading them. (An assembly shop operator).

> The shop floor's afraid to fill in those forms. The management are so vindictive here the boys honestly believe that their cards will be marked and it will lead to sackings.
>
> Some of them honestly believe that because the forms were attached to the pay slips then that's allowed the company to secretly mark the forms with clock numbers. You know, invisible ink that can show up under a light. That's the latest rumour. Some of the men really believe it. That's how afraid they are. (A maintenance worker).

These two comments appeared on the questionnaire forms:

> Firstly, the reason I have not filled in all the questions - the company would be able to find out who I am. Knowing them as I do they would then take action against me. Despite what you say in your statement the company will be able to see some of these surveys.

> I have not filled in the first page because from these facts my name can be established, and I do not trust this management or anyone that deals with them.

Some workers, such as this press shop operator, saw participating in the survey as an act of surrendering to management:

> I'm not filling this in if the company won't give me time off. They've pushed bell to bell down our throats, they've taken our time away, so don't expect me to give them any of my own.

The missing nightshift also had to be tackled. Following a heated discussion with the CarPress personnel manager I secured the company's agreement to redistribute 160 questionnaires to a large sample of nightshift production and craft operators. This time, participants were granted 10 minutes time off work in a highly controlled fashion. At 11.00am on the appointed day (when the original nightshift had alternated to the dayshift), production foremen distributed the questionnaires under the surveillance of myself and a number of shop stewards. Participants were instructed to commence filling in the forms at 11.40 am, ten minutes before their 11.50am lunch-break. The foremen and accompanying stewards stood by a number of boxes until the

end of the lunch-break, during which the operators could voluntarily hand in their forms. As a result of this process, 140 forms were returned.

The final response rate was calculated at 68%. Subtracting the whole nightshift of 239 employees from the first distribution of 651 left 412 questionnaires delivered to the dayshift and to office workers. Adding the second sampled nightshift distribution of 160 questionnaires to this figure produced an overall distribution of 572 from which 387 were returned: 68% of the total..

The second questionnaire survey in November 1995 was marked by a similar degree of managerial chicanery and shop-floor suspicion. On this occasion, the company reverted to refusing to allow time off for completing forms. However, it did agree to provide 15 minutes of the 30 minute monthly team briefing sessions for this purpose, a decision which pleased many employees who by this time had become both disillusioned and bored with the briefing system. Once again, the shop stewards insisted that they be allowed to monitor the collection of forms in response to shop-floor fears that foremen were likely to read and mark them.

I arrived at the factory on 30 October 1995 and spent all afternoon and part of the following morning arranging the questionnaires into different piles for allocation to each team and section. Unfortunately, I was unable to meet the shop stewards until one hour before the team briefings were due to commence. At this point, they informed me they had been called to an 'urgent meeting' with the head of personnel. Consequently, no stewards were available to monitor the collection of forms.

A number of workers spoke to me of their unease at handing their forms direct to foremen; and no ballot boxes were available this time. Feeling angry and somewhat uneasy myself, I decided to remain at the plant all evening to be present at the distribution of questionnaires to the nightshift rather than collect them the following morning. Although a small number of shop stewards were available during the shift I did not feel happy at the thought of piles of completed forms sitting tantalisingly in different foremen's offices. Consequently, as each nightshift team briefing session came to a close I immediately collected the forms myself.

On the day of the survey, I arrived at the factory at 8.30am and left at 2.30am the following morning - an exhausting process! However, my perseverance proved worthwhile. Due to both sickness absenteeism and workers being temporarily absent from workstations, 630 questionnaires were eventually distributed. From these, a total of 533 completed forms were returned, an overall response rate of 85%. The rate on the shop-floor reached 87%; in office areas it was lower at 69%.

The two survey questionnaire forms are reproduced in Appendix C.

APPENDIX B

STATISTICAL INDICATORS OF WORK ATTITUDES AT CARPRESS

Table B.1, Examples of differences in work attitudes by length of service (shop-floor workers only)

	Agree (%)	Disagree (%)	Undecided (%)
'I preferred the 'seniority' system when operators with longer service stayed on their own machines'.			
Assy Shop Ops, <5 yrs service	15	67	18
Assy Shop Ops, >5 yrs service	61	29	10
x2 = 34.737, d.f. = 2 *			
'I haven't got the time to take on new tasks and responsibilities'.			
All Operators, <5 yrs service	44	22	34
All Operators, >5 yrs service	65	17	18
x2 = 16.623, d.f. = 2 *			
'Teamworking has been introduced to increase my job satisfaction'. ***			
All Operators, <5 yrs service	23	43	34
All Operators, >5 yrs service	15	64	21
x2 = 8.326, d.f. = 2 **			
'As a teamworker, I'm no longer a number - I'm now treated as a human being'.			
All Operators, <5 yrs service	20	52	28
All Operators, >5 yrs service	12	68	20
x2 = 10.252, d.f. = 2 *			
'Teamworking has given me more tasks to do but no real skills.'			
All Operators, <5 yrs service	50	17	33
All Operators, >5 yrs service	59	22	19
x2 = 10.241, d.f. = 2 *			
'Teamworking has made me more accountable for the work that I do'.			
All Operators, <5 yrs service	46	19	35
All Operators, >5 yrs service	42	36	22
x2 = 14.425, d.f. = 2 *			

* = significant at the 0.001 level; ** = significant at the 0.05 level

*** = first survey (1994; N = 316); the remainder are extracted from the second survey (1995; N = 471)

Table B.1 Continued

	Yes (%)	No (%)	Undecided (%)
'Do you believe most of the information you receive from management?'			
All Operators, <5 yrs service	24	45	31
All Operators, >5 yrs service	19	63	18
x2 = 12.250, d.f. = 2 *			
'Would you support the idea of your union signing a 'no strike deal' with the company?' ***			
All Operators, <5 yrs service	16	60	24
All Operators, >5 yrs service	14	75	11
x2 = 7.502, d.f. = 2 **			
'I think that CarPress is a pretty good place to work these days'.			
	Agree (%)	**Disagree (%)**	**Undecided (%)**
All Operators, <5 yrs service	35	33	32
All Operators, >5 yrs service	18	66	16
x2 = 40.793, d.f. = 2 *			

* = significant at the 0.001 level; ** = significant at the 0.05 level
*** = first survey (1994; N = 316)); the remainder are extracted from the second survey (1995; N = 471)

Table B.2, Differences in perceptions of trust relations by length of service (shop-floor workers only)

Assessment of overall level of trust existing between management and the workforce				
	Complete Trust (%)	**Trust Most Of The Time (%)**	**Not Much Trust (%)**	**No Trust At All (%)**
All Operators, <5 yrs service	2	15	39	43
All Operators, >5 yrs service	2	7	33	58
x2 = 12.562, d.f. = 3 *				

* = significant at the 0.001 level
N = 471

Table B.3, Aspects of work most and least important to shop-floor and office workers

	PERCENT 1994	PER CENT 1995
The aspects of work which respondents felt were most important to them.		
Decent working conditions	56	62
Getting on well with colleagues	23	22
Getting on well with supervision	4	5
Good pay	83	80
Having an interesting job	21	21
Having responsibilities at work	7	6
Job security	76	73
Plenty of overtime	5	6
Opportunity to use initiative	6	7
Good industrial relations	14	12
Good promotion prospects	4	5
The aspects of work which respondents felt were least important to them.		
Decent working conditions	6	5
Getting on well with colleagues	18	18
Getting on well with supervision	40	39
Good pay	3	3
Having an interesting job	14	19
Having responsibilities at work	32	25
Job security	1	3
Plenty of overtime	72	65
Opportunity to use initiative	18	24
Good industrial relations	16	21
Good promotion prospects	59	57

Respondents were asked to choose 3 aspects of work which were most important to them and three which were least important.

In the 1994 survey, N = 383 for replies to aspects of work which are most important and 355 for aspects which are least important; thus, there were 4 and 32 sets of missing values respectively.

In the 1995 survey, N = 498 for replies to aspects of work which are most important and 423 for aspects which are least important; thus, there were 35 and 110 sets of missing values respectively.

APPENDIX C

JAPANESE TRANSPLANT AND CARPRESS SURVEY QUESTIONNAIRES

Figure C.1, Questionnaire supplied to 5 Japanese transplants

(Note: This was used as a basis for follow-up telephone interviews).

1. How many people are employed at the factory?

2. Of these, how many are employed in the following functions?

   Shop-floor (production and quality)
   Design
   Management
   Administration and others

3. Numbers or percentages of male and female employees:

   Male
   Female

4. Numbers of temporary staff?

5. What production technology is utilized on the shop-floor? Please tick one or more of the following, if applicable:

   Automated/robotic assembly
   Flow line manual assembly
   Assembly at unitary workstations
   Cell working
   Other (please specify)

6. Which of the following best describes the production control system?

   Just-in-time production
   Reduced inventories through tightly controlled production schedules
   Traditional production control with buffer stocks

7. Does a teamworking system operate on the shop-floor?

   Yes *No*

8. If teamworking does operate, what is the typical size of each team?

9. If teamworking does operate, does each team have a teamleader?

   Yes *No*

Figure C.1 Continued

10. Which of the following are used to achieve labour flexibility on the shop-floor?

Each operative carries out different tasks anywhere in the factory
Each operative carries out different tasks only within the team
A minority of 'floats' carry out different tasks

11. Are any of the following Total Quality Management practices used at the plant?

Kaizen/Quality Circles in employees' own time
Kaizen/Quality Circles in company's time
Quality issues raised in team briefings
Suggestion scheme
Company conventions
Other

12. Does the company operate team briefings?

Yes *No*

13. If the answer to Question 12 is yes, what is the frequency of these meetings?

14. Does the company operate a Company Council or Advisory Board?

Yes *No*

15. Does the company recognise any trade union(s)? If so, which one(s)?

16. Does the company operate a single status policy? If it does, which of the following are included?

Car parks
Canteen
Uniforms
Clocking
Harmonised pay system
Hours
Sick pay scheme
Pension
Grading scheme
Other (please specify)

17. Does the company operate a job security or no redundancy policy?

Yes *No*

18. If the answer to Question 17 is Yes, is this managed by any of the following?

Use of overtime
Annualised hours
Flexible hours
Temporary staff
Extension of probationary periods
Other (please specify)

Figure C.1 Continued

19. Does the company operate a formal equal opportunity policy?

Yes
No

20. Does the company's pay system use any of the following?

Basic weekly/monthly pay
Shift pay
Performance related pay
Profit sharing
Attendance bonus
Any other form of bonus (please specify)

21. Does the company operate an employee performance assessment scheme?

Yes
No

22. Does the company operate formal grievance and disciplinary procedures?

Yes
No

23. What specific qualities are required of new recruits? (Please tick any of the following):

Dexterity skills
Mechanical skills
Electrical skills
Teamworkers
Flexibility
Prepared to work overtime
Good timekeeping
Company loyalty
Young age
Other (please specify)

Figure C.2, CarPress workforce attitude survey, first questionnaire (October 1994)

CARPRESS LTD, WORKFORCE ATTITUDE SURVEY

QUESTIONNAIRE

All answers are strictly confidential. Please attempt all questions in each section by ticking the appropriate answer box or by writing down your answers when requested.

SECTION 1. BACKGROUND INFORMATION

1. What is your job title?.....

2. What is your grade?.....

3. What section or department do you work in?.....

4. Are you .....MALE...[ ] FEMALE...[ ]

5. How old are you?.....

6. How many years have you worked for the company?.....

7. Are you a member of a trade union.....YES [ ] NO [ ]

8. If so, which trade union?.....

9. Are you weekly or monthly paid?.....WEEKLY [ ] MONTHLY [ ]

10. If you are weekly paid, what is your approximate weekly take home pay?.....

11. If you are monthly paid, what is your approximate monthly take home pay?.....

12. On average, how many hours of overtime do you work each week?.....

13. What is your highest educational qualification? (Please tick one of the following):

No qualifications [ ]
Skilled apprenticeship [ ]
CSE, or GCSE grades D to F [ ]
GCE 'O' Level, or GCSE grades A to C [ ]
A levels [ ]
ONC/OND/BTEC [ ]
HNC/HND/BTEC [ ]
Degree [ ]

Figure C.2 Continued

SECTION 2 TEAMWORKING

14. Are you personally in favour or against the introduction of teamworking at this site?

Strongly in favour	[ ]
In favour	[ ]
Undecided	[ ]
Against	[ ]
Strongly against	[ ]

15. Do you understand how teamworking is likely to operate at this site?

Yes [ ] No [ ]

16. What effect, if any, do you believe teamworking will have on long term job security at the site?

Teamworking will lead to redundancies	[ ]
Teamworking will have no effect	[ ]
Teamworking will help to create jobs	[ ]

17a. What is your view on the following statement:

Teamworking has been introduced to increase my job satisfaction

Strongly agree	[ ]
Agree	[ ]
Undecided	[ ]
Disagree	[ ]
Strongly disagree	[ ]

17b. What is your view on the following statement:

Teamworking has been introduced to improve efficiency and make me work harder

Strongly agree	[ ]
Agree	[ ]
Undecided	[ ]
Disagree	[ ]
Strongly disagree	[ ]

Figure C.2 Continued

SECTION 3 LABOUR FLEXIBILITY AND PRODUCTIVITY

18. What is your view on the following statement:

It is reasonable for management to request me to carry out any new task anywhere in the factory.

Strongly agree [ ]
Agree [ ]
Undecided [ ]
Disagree [ ]
Strongly disagree [ ]

19. Have you been on any training course since you have been employed at the company?

Yes [ ] No [ ]

20. What is your view on the following statement:

Labour flexibility at this site just means I'll have to work harder with less job security.

Strongly agree [ ]
Agree [ ]
Undecided [ ]
Disagree [ ]
Strongly disagree [ ]

21. Do you support or oppose the practice of bell to bell working?

Strongly support [ ]
Support [ ]
Undecided [ ]
Oppose [ ]
Strongly oppose [ ]

22. Do you believe that you are now working harder compared to 10 years ago?

Yes [ ] No [ ] Undecided [ ]

SECTION FOUR QUALITY ISSUES

23. What is your view on the following statement:

I should take on more responsibility for the quality of the company's products.

Strongly agree [ ]
Agree [ ]
Undecided [ ]
Disagree [ ]
Strongly disagree [ ]

Figure C.2 Continued

24. Do you support or oppose the idea that you and your colleagues should actively criticise each other for poor workmanship?

Strongly support [ ]
Support [ ]
Undecided [ ]
Oppose [ ]
Strongly oppose [ ]

25. Do you support or oppose the idea of you and your colleagues meeting once a month in small groups to discuss ways of improving the productivity, efficiency and quality of each other's work?

Strongly support [ ]
Support [ ]
Undecided [ ]
Oppose [ ]
Strongly oppose [ ]

SECTION 5 COMPANY COMMUNICATIONS

26. Are you satisfied with the amount of information you receive from management about what's going on at the company?

Very satisfied [ ]
Satisfied [ ]
Undecided [ ]
Dissatisfied [ ]
Very dissatisfied [ ]

27. Do you feel that you have enough say on decisions made at work:

Concerning your own job and working conditions? *Yes* [ ] *No* [ ]
Concerning the running of your department/section? *Yes* [ ] *No* [ ]
Concerning the whole factory? *Yes* [ ] *No* [ ]

28. What is your main source of information about what is going on at work? (If more than one applies choose the main three and rank them in order of importance from 1 to 3 with 1 as the most important):

My immediate supervisor [ ]
The 'grapevine' [ ]
My trade union [ ]
Team briefing [ ]
Company notices on notice boards [ ]
Company newsletter [ ]
Other (please specify)..... [ ]

Figure C.2 Continued

SECTION 6 INDUSTRIAL RELATIONS

29. Do you believe that your trade union is effective on your behalf?

Yes [ ] No [ ]

30. Would you support or oppose the idea of having just one union at the company?

Strongly support	[ ]
Support	[ ]
Undecided	[ ]
Oppose	[ ]
Strongly oppose	[ ]

31. Would you support or oppose the idea of your union signing a no-strike deal with the company?

Strongly support	[ ]
Support	[ ]
Undecided	[ ]
Oppose	[ ]
Strongly oppose	[ ]

SECTION 7 WORK VALUES

32. All things considered, how satisfied would you say you are with your job?

Very satisfied	[ ]
Satisfied	[ ]
Undecided	[ ]
Dissatisfied	[ ]
Very dissatisfied	[ ]

33. Which THREE of the following aspects of work are most important to you and which THREE are least important?

	Most Important	*Least Important*
Decent working conditions	[ ]	[ ]
Getting on well with my work colleagues	[ ]	[ ]
Getting on well with supervision	[ ]	[ ]
Good pay	[ ]	[ ]
Having an interesting job	[ ]	[ ]
Having responsibilities at work	[ ]	[ ]
Job security	[ ]	[ ]
Plenty of overtime	[ ]	[ ]
Opportunity to use initiative	[ ]	[ ]
Good industrial relations	[ ]	[ ]
Good promotion prospects	[ ]	[ ]

Figure C.2 Continued

34. What is your view on the following statement:

I have a good, co-operative relationship with my supervisor.

Strongly agree [ ]
Agree [ ]
Undecided [ ]
Disagree [ ]
Strongly disagree [ ]

35. Which one of the following statements sums up your relationship with your supervisor?

I decide what I do and how I do it [ ]
My supervisor decides what I do but I decide how I do it [ ]
My supervisor decides what I do and how I do it [ ]

36. What is your view on the following statement:

The Company treats me with respect and trust

Strongly agree [ ]
Agree [ ]
Undecided [ ]
Disagree [ ]
Strongly disagree [ ]

37. If you have any comments on any of the above issues, or any other aspect of your employment at CarPress, then please write about them in the space below. You may continue over the page if you wish.

Figure C.3, CarPress workforce attitude survey; second questionnaire (November 1995)

CARPRESS LTD, WORKFORCE ATTITUDE SURVEY

QUESTIONNAIRE

All answers are strictly confidential. Please attempt all questions in each section by ticking the appropriate answer box or by writing down your answers when requested.

SECTION 1. BACKGROUND INFORMATION

1 What is your current job:

Grade 1 Operator	[ ]
Grade 2 Operator	[ ]
Grade 3 Operator	[ ]
Grade 4 Operator	[ ]
Staff	[ ]

2. Are you: .....*Male*...[ ] *Female*...[ ]

3. What age group are you in?

Aged 25 and under	[ ]
Aged 26-30	[ ]
Aged 31 and above	[ ]

4. How many years have you worked at this site?

5 years or less	[ ]
6 to 10 years	[ ]
Over 10 years	[ ]

5. Are you a member of a trade union.....*Yes* [ ] *No* [ ]

6. If so, which trade union?.....

7. Are you weekly or monthly paid?.....*Weekly* [ ] *Monthly* [ ]

Figure C.3 Continued

SECTION 2 TEAMWORKING

8. What is your view on the following statements? (please tick the appropriate box for each statement).

a) I get more satisfaction from working on different machines each day rather than working on the same machine.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

b) I preferred the 'seniority' system when operators with longer service tended to stay on their own machines.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

c) I enjoy the extra responsibilities that you get with teamworking.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

d) I'd like to take on extra tasks such as machine cleaning and simple maintenance because that would improve my job satisfaction.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

e) I think I should be paid more money for extra tasks such as machine cleaning and simple maintenance.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

f) I just haven't got the time to take on new tasks and responsibilities.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

9. What is your view on the following statements and questions?

a) I believe that all managers and employees should be members of the same 'company team'.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

b) I think that the management here believe they are in a separate team to the employees.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

c) If you encounter a problem with your work, such as faulty components or your machine is producing poor quality parts, do you first:

See your Manufacturing Manager [ ] *See your Unit Manager* [ ]
Try and solve the problem yourself [ ] *Do nothing* [ ]

10. What impact has teamworking had on your overall interest in the job?

IMPROVED [ ] *REDUCED* [ ] *NO IMPACT* [ ]

Figure C.3 Continued

11. What is your view on the following statements?

a) Teamworking has given me a new pride in my own work.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

b) Teamworking allows me to make my own decisions about the job instead of having to ask my supervisor.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

c) As a teamworker I'm no longer a number, I'm now treated as a human being.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

d) Teamworking has given me new job skills.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

e) Teamworking has given me more tasks to do but no real skills.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

f) Teamworking has made me more accountable for the work that I do.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

g) Now I'm a teamworker I accept that meeting the needs of the customer is more important than hitting my score or target.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

12. What do you believe is the main purpose of the ITEM/NVQ Programme?

To develop my technical skills [ ]
To enable me to carry out my work more efficiently [ ]
To help me develop more positive attitudes to change at the workplace [ ]
It's all just window dressing put on to impress the customer [ ]
It serves no useful purpose at all [ ]

13. Would you say you are now working harder compared to a year ago?

YES [ ] *NO* [ ] *UNDECIDED* [ ]

Figure C.3 Continued

SECTION 3 QUALITY ISSUES

14. What is your view on the following statements?

a) I'd like to get into a kaizen group because I'm interested in helping the company improve plant efficiency by developing new working methods.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

b) I'd like to get into a kaizen group because it will give me the opportunity to develop new problem-solving skills.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

c) I'd like to get into a kaizen group because I want to share my interest in improving company performance with other people.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

d) I'd like to get into a kaizen group because it will give me a welcome rest from production work.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

e) If I make suggestions to improve plant performance it'll make no difference because management will take no notice.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

f) I'd only be interested in getting into a kaizen group if I new the company would pay me for my suggested improvements.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

g) I'm not interested in kaizen groups because I think they will be used to cut jobs.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

h) I'm not interested in kaizen groups because raising productivity just means I'll have to work even harder.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

i) I'm really not interested in kaizen groups at all.

AGREE [ ] *DISAGREE* [ ] *UNDECIDED* [ ]

15. Do you think it makes sense to regard your colleagues in your team as customers of your work?

YES [ ] *NO* [ ] *UNDECIDED* [ ]

16. Do you think it makes sense to regard other teams in the factory as customers of your team's work?

YES [ ] *NO* [ ] *UNDECIDED* [ ]

17. Do you believe that you should take on more responsibility for inspecting and approving your own work?

YES [ ] *NO* [ ] *UNDECIDED* [ ]

Figure C.3 Continued

18. Do you have enough time for inspecting and approving your own work?

YES [ ] *NO* [ ] *UNDECIDED* [ ]

19. When you are given a job do you ever think about the requirements of the main customer (Rover, Opel, Toyota, etc.) as you carry out your work?

Most of the time [ ] *Sometimes* [ ]
Rarely [ ] *Never* [ ]

SECTION 4 COMPANY COMMUNICATIONS

20. Would you say that company communications have improved over the past 12 months?

Improved [ ] *Unchanged* [ ] *Worse* [ ]

21. What are your main sources of information about what is going on at work? (If more than one applies choose the main three and rank them in order of importance from 1 to 3 with 1 as the most important):

My immediate supervisor [ ]
The 'grapevine' [ ]
My trade union [ ]
Monthly briefing [ ]
Quarterly business review [ ]
Company notices on boards [ ]
Company newsletter [ ]
Other (please specify)..... [ ]

22. Do you believe most of the information you receive from management?

YES [ ] *NO* [ ] *UNDECIDED* [ ]

23. Do you believe most of the information you receive from the union?

YES [ ] *NO* [ ] *UNDECIDED* [ ]

24. Do you find the information you receive from the company of interest?

YES [ ] *NO* [ ] *UNDECIDED* [ ]

Figure C.3 Continued

25. What impact do you think your team briefings have had on the following:

The amount of useful information you receive about the Company
Increased [ ] *Decreased* [ ] *No change* [ ]

Your understanding of management decisions
Increased [ ] *Decreased* [ ] *No change* [ ]

Your commitment to the company
Increased [ ] *Decreased* [ ] *No change* [ ]

Management's openness
Increased [ ] *Decreased* [ ] *No change* [ ]

Opportunities for you to have a say about what's going on at work
Increased [ ] *Decreased* [ ] *No change* [ ]

26. Do you feel that you have enough say on decisions made at work:

Concerning your own job and working conditions?	*Yes* [ ] *No* [ ]
Concerning the running of your department/section?	*Yes* [ ] *No* [ ]
Concerning the whole factory?	*Yes* [ ] *No* [ ]

SECTION 5 MISCELLANEOUS

27. What do you think of the overall level of trust that exists between management and the workforce here? Would you say that there is:

Complete trust	[ ]
Trust most of the time	[ ]
Not much trust	[ ]
No trust at all	[ ]

28. What is your view on the following statement?: 'I think that CarPress is a pretty good place to work these days'.

Agree [ ] *Disagree* [ ] *Undecided* [ ]

29. What is your view on the following statement?: 'I think that recently, the Company has put a lot of effort into cultivating a spirit of trust between management and workers'.

Agree [ ] *Disagree* [ ] *Undecided* [ ]

30. All in all, would you say that you have experienced a lot of changes in working practices at CarPress over the past 12 months?

Yes [ ] *No* [ ] *Undecided* [ ]

Figure C.3 Continued

31. Which THREE of the following aspects of work are most important to you and which THREE are least important?

	Most Important	*Least Important*
Decent working conditions	[ ]	[ ]
Getting on well with my work colleagues	[ ]	[ ]
Getting on well with supervision	[ ]	[ ]
Good pay	[ ]	[ ]
Having an interesting job	[ ]	[ ]
Having responsibilities at work	[ ]	[ ]
Job security	[ ]	[ ]
Plenty of overtime	[ ]	[ ]
Opportunity to use initiative	[ ]	[ ]
Good industrial relations	[ ]	[ ]
Good promotion prospects	[ ]	[ ]

32. If you have any comments on the above issues, or any other aspect of recent changes at CarPress, then please write about them in the space below or overleaf.

Thanks for your co-operation again!

APPENDIX D

CARPRESS NEW WORKING PRACTICES AGREEMENT

TEAM WORKING AND CONTINUOUS IMPROVEMENT

POLICY AGREEMENT

It has been agreed between the parties that the attached Team Working and Continuous Improvement Policy will be incorporated as a term of employment for all employees employed at the Company's Llanelli Plant.

To ensure the attainment of the objectives of the Policy consultation with representatives of the Trade Unions recognised by the Company will be enhanced to ensure maximum understanding of the Company Performance, Competitive Practices and Standards, Product and Company plans and all areas of activity affecting the Company and its employees.

The parties agree that all discussions concerning all Terms and Conditions of Employment and all other matters relevant to the employees employed at the Llanelli Plant will be conducted at Company Level and the Group Joint Negotiating Committee will be discontinued.

The Unions accept that in order to achieve the objectives of the Policy any Grievance or Dispute concerning the Policy should first be resolved using the Company Grievance Procedure. The Union accepts that it will not initiate or take any form of industrial action until this procedure has been fully exhausted.

FOR THE COMPANY FOR THE UNIONS

LTD.

THE WAY FORWARD

COMMITMENT

Ltd. and its employees are committed to the establishment of an environment that promotes:-

i. The adoption of Continuous Improvement/Teamworking activities throughout the Plant.

ii. The continuous growth and development of all employees to enable them to contribute towards realising both personal and business objectives.

iii The empowerment of all employees to enable them to make the maximum contribution to the setting and achieving of business goals.

iv The creation of a Single Status Company where all distinctions between Staff and Hourly Paid will be ended.

17TH MAY 1994

NEW TERMS AND CONDITIONS OF EMPLOYMENT

1. FLEXIBILITY

All employees will be expected to perform any job or function for which they have the relevant skills and training. Every employee will have unrestricted access to the use of Company tools and equipment necessary for them to make their contribution. All employees will be available for work for the entire period of their shift.

2. GRADING STRUCTURE

A New Grading Structure and Pay Schedule will be introduced as follows:

GRADE 1	-	£277.54
GRADE 2	-	£268.50
GRADE 3	-	£256.00
GRADE 4	-	£249.44

All employees will be committed to achieving a minimum Plant Gross Efficiency Performance of 133. A Plant Bonus Scheme of 70p per point for all Grade 1 and Grade 2 employees and £1.20 per point for all Grade 3 and Grade 4 employees will be introduced for Plant Gross Efficiency levels between 134 and 138.

Subject to an improved and consistent Gross Plant Performance being sustained the Plant Gross Efficiency Bonus will be consolidated into basic pay (up to a maximum of 138) on 1st January 1996.
The amount consolidated will be the average bonus achieved over the six month period 1st July 1995 to 31st December 1995.

3. PROGRESS BETWEEN GRADES

Progress through the Grades will be through the achievement of recognised skills and competencies. A system of general and plant specific National Vocational Qualifications will be introduced at all levels and all employees will be required to undergo training that will increase their opportunity to contribute to the achievement of Company Goals.

4. CURRENT EMPLOYEES

All current employees will be transferred immediately to the New Grading Structure. All employees will be required to undergo the full training necessary to enable them to achieve the N.V.Q.'s appropriate to their new appointments.

TRANSFER SCHEDULE

CURRENT GRADE	NEW GRADE
1X	1
1A	2
4A (DIRECTS)	3
4A (INDIRECTS)	4
5A (DIRECT AND INDIRECT)	4

5. TEAMWORKING

The Company will progressively introduce Teamworking throughout the Plant on the same terms and conditions as outlined in this agreement. All employees will be phased into Teams in line with their abilities and the needs of the Company.

6. TEAM-MEMBERS

All current employees entering teams will enter at their existing Grade. Future progress will be as a result of achieving the appropriate competency standards.

7. TEAM LEADERS

All Team Leaders will on successful completion of the appropriate N.V.Q. be transferred to a minimum of Grade 3. Progress through the remaining Grades will be as a result of achieving further appropriate N.V.Q.'s All current Team Leaders will be appointed to Grade 3 immediately on the conditions outlined in Clause 3.

8. NEW STARTERS

All new starters will undertake a Company assessment and will be appointed to the grade appropriate to their skills and competencies as evidenced by a current N.V.Q.

9. CONTINUOUS IMPROVEMENT

Continuous Improvement is the continual improvement of the Companies performance and competitive position through process improvement, the elimination of waste, and increased levels of efficiency. All employees will participate in Kaizen Discussion Groups, Quality Action Teams, and all other activities that continuously improve processes and company performance.

10. SENIORITY

The only measure of seniority will be Plant Seniority. There will be no restricted practices associated with Seniority. All employees will be flexible within their skills competencies and abilities.

11. REDUNDANCY

There will be no Compulsory Redundancies as a result of any Teamworking and Continuous Improvement activities.

12. PLANT BONUS SCHEME

Ltd. and its employees will commit themselves to achieving the highest Plant Gross Performance Levels they can achieve. In order to allow the Plant Gross Performance Level to realistically reflect plant efficiency all teams will be measured and performance standards applied. This will mean that Plant Gross Efficiency levels will accurately reflect total plant performance.

13. SHIFT PREMIUMS

Shift Premiums will be paid as follows:-

6.00 a.m. - 2.00 p.m. and 2.00 p.m. to 10.00 p.m. (FIXED)	16.66%
6.00 a.m. - 2.00 p.m. and 2.00 p.m. to 10.00 p.m. (ROTATING)	22.66%
NIGHTS	33.33%

Management confirm that they have no intention of introducing a fixed shift pattern for the foreseeable future. Any changes to the current Shift Patterns would be subject to consultation with the relevant Trade Unions.

14. OVERTIME RATES

All overtime worked above the standard 37 hour week (pro-rata to include Bank Holidays, Holidays etc) will be paid at current premium rates. All overtime worked before completion of 37 hours in any one week will be paid at basic rate. The 37 hour week will be assumed to be inclusive of all worked hours from Monday to Friday.

15. HOLIDAY PAY

Holiday Pay will be paid at basic rate earnings in the Year in which the holiday is being taken.

16. SICK PAY

A New Sick Pay Scheme that introduces payment at basic rate earnings, from Day One of Sickness for a maximum of eight weeks, in line with the current Staff Sick Pay Rules, will be progressively introduced as follows:-

STAGE 1

Sick Pay for 3rd day of sickness will be introduced for the period 1st July 1994 to 31st December 1994.

If the average absence for the period January - December 1994 is below 5.5% Stage 2 will be introduced.

STAGE 2

Sick Pay for the 2nd day of Sickness will be introduced for the period 1st January 1995 to 1st April 1995.

If the average absence for the period January - April 1995 is below 4.5% Stage 3 will be introduced.

STAGE 3

Sick Pay for the 1st day of Sickness will be introduced for the period April - December 1995.

If absence rates do not fall below the outlined levels the phased introduction will be halted until the levels have been achieved for a full calendar year.

If Sick rates increase to above the levels that allowed the adoption of any stage then the previous stage rules will be reintroduced for a full calendar year to allow the absence rates to fall below the required level to reintroduce that stage.

17. CREDIT TRANSFER

With the exception of those people unable to open a Bank Account for legal reasons all employees will be paid by Credit Transfer by 30th June 1994.

18. HOLIDAYS

Holidays and Shut-down periods will be dictated by Customer Schedule and/or demand. Holiday date allocation will therefore fluctuate from department to department and team to team based on Customer Service requirements.

19. UNION RECOGNITION

Ltd. will continue to recognise the following Trade Unions:-

AMALGAMATED ENGINEERING AND ELECTRICAL UNION
TRANSPORT AND GENERAL WORKERS UNION

Consultation with representatives of the recognised Trade Unions will be enhanced to ensure maximum understanding of Company Performance, Competitive Practices and Standards, Product and Company Plans and all areas of activity affecting the Company and its employees.

20. PLANT BARGAINING

All future discussions concerning Terms and Conditions of Employment will be conducted at Plant Level.

21. TRAINING

All employees will be required to undertake all training identified by the Company that will enable them to contribute to the achievement of Company objectives.

22. GRIEVANCE PROCEDURE

In the event of any grievance or dispute which any employee may have the Company Grievance Procedure will be used to resolve the problem - there will be no industrial action until this procedure has been exhausted and the necessary legal procedures adhered to.

23. LAYOFFS

The Company do not intend to lay off its employees. When a problem distrupts production employees will be engaged in other worthwhile activities unless:

- the problem is caused by any form of internal industrial action
- the problems are prolonged by any exceptional circumstances.

24. CONTRACTS OF EMPLOYMENT

Following acceptance of this agreement all Hourly Paid employees will sign New Contracts of Employment detailing all the agreed changes to Working Practices and Terms and Conditions of Employment.

25. CUSTOMER COMMITMENT

Under this Agreement Ltd and its employees are committed to total customer satisfaction by ensuring that outdated industrial relations practices that restrict or threaten the interruption of customer supplies will be eliminated.

26. FUTURE PLANS

Discussions will take place with the relevant Trade Unions to establish framework agreements to cover the following agreed objectives:-:-

- All employees if they wish will be invited to participate in a regular health check provided by the Company.
- Everyone working within the Company will wear Company Workwear.
- The minimum notice period for all employees will be one month when monthly paid.
- A Performance Development Programme covering all employees will be progressively introduced.

FOR THE COMPANY

FOR THE UNION:

APPENDIX E

CARPRESS DISMISSALS: NOTICE OF DISCIPLINARY APPEAL

4th November 1994

Dear

NOTICE OF DISCIPLINARY APPEAL

This letter is advance notice to inform you of the details of how your Appeal against the decision to dismiss you for gross misconduct will be conducted.

TIME, DATE AND PLACE

Your Appeal will be heard at:

TIME: 8.30 am

DATE: WEDNESDAY 9TH NOVEMBER 1994

PLACE:

APPEAL

The Appeal will be by way of a reinvestigation of the events leading up to and including the walk out that occurred on 26th October 1994. (The Company J.N.C. no longer exists and therefore the structure has been agreed with your Union as being a fair way to proceed.) You will be given a full opportunity to state your case and be heard and raise any points or evidence if you so wish. The decision of the Appeal Chairman will be final and will exhaust the disciplinary procedure.

REPRESENTATION

You are entitled to be accompanied or represented by a Full Time Officer/Senior Shop Steward.

The Appeal will be heard by the Company's Managing Director, .. (The Company's Human Resource Manager . will also be present at the Appeal but will take no part in the decision making process.

WITNESSES

You are entitled to call any witness of your own to be heard or to question any witness of the Company whose evidence may have been relied upon. In order to ensure that any such person is available, please ensure that the Company is given advance notice of any witnesses whom you will wish to question.

ADJOURNMENTS

The Appeal Hearing may be adjourned in exceptional circumstances if necessary for further investigations. If so, it will then be re-convened as soon as reasonably possible.

REASON FOR DISMISSAL AND EVIDENCE

At the initial Disciplinary Hearing you were found guilty of gross misconduct in participating in unofficial industrial action and in leaving your workplace without authority. In particular the grounds for your dismissal were that:

- Participating in Unofficial Overtime Ban from Tuesday 25th October 1994.
- Leaving your workplace without authority on the afternoon of Wednesday 26th October 1994.
- Attending an unauthorised meeting on the afternoon of Wednesday 26th October 1994.
- Refusing to obey a repeated instruction to return to your workplace by a Senior Manager.
- Refusing to obey a final instruction to return to your workplace leaving a Senior Manager with no alternative but to request you to clock off if you were not prepared to return to your workplace.
- You materially caused, influenced or contributed to employees leaving their workplace without authority.
- Your explanation of events leading up to and including the above events cannot be accepted as accurate.
- You showed no remorse or regret and showed disregard for your Contract Terms.

A copy of the notes of your DISCIPLINARY interview and the Production Manager's Written Statement, is enclosed with this letter.

DECISION OF THE APPEAL

You will be notified of the outcome of the Appeal in writing. It is envisaged that the Company will communicate that decision after it has heard all the Appeals in respect of this matter.

That decision could be to confirm that it was appropriate for you to have been summarily dismissed for gross misconduct, reduce the penalty or overturn the original finding of gross misconduct. It will not increase the penalty already imposed upon you.

Yours sincerely
for: LTD.

HUMAN RESOURCE MANAGER

APPENDIX F

CARPRESS STRIKE BALLOT: LETTER FROM THE CHAIRMAN

Dear Colleague 30 November 1994

On Wednesday, 26th October 1994, 104 of your fellow employees at Ltd. took unofficial industrial action by leaving their place of work without authority.

Their action was taken over an issue that was already under discussion between the Company and your Unions under the agreed disputes procedure. Accordingly there was no justifiable reason for them to do what they did.

The employees taking the action were suspended and following the subsequent Disciplinary and Appeal Hearings, 21 employees who were at the heart of the action were dismissed. 'The remainder received Final Written Warnings.

This whole episode was both damaging and disappointing given the commitment everyone in had made to "The Way Forward" document. The commitment made to change outdated working practices, eliminate walk-outs, work to rules and other types of wildcat unofficial industrial action, did not last very long!

I personally told our customers that the signing of New Contracts by the employees at was a new beginning. I told Rover in particular that our unreliable performance was a thing of tne past and that they could now confidently give us new business. Rover have since told me that the employees who broke their Contracts on 26th October have given them a very different message. Despite all that has been said and done, Rover believe nothing has changed.

Quite frankly, I do not believe this is true. I believe it is a minority who have now put under threat what the majority have achieved. I also believe that the Management had absolutely no option at all but to take the action they did and that by doing so, they were protecting the jobs of the majority in our Company.

This week there is to be a ballot to ask you whether you are prepared to take strike action in support of those who have been dismissed. The very ballot will be damaging to our Company but, even worse, a strike would just torpedo our future existence. In any event, strike action will not persuade management to change their decision. The proper route for the dismissed employees is to take their case to an industrial tribunal.

I want to make it clear to you that any employee who does not abide by the terms of his or her Contract may be liable to dismissal. This is not Management being heavy-handed. It is demonstrating to our customers that can be relied upon to keep its commitments. Without that assurance, I can tell you customers will not place business with us.

We have set the wheels in motion to secure the long term future for the business and to maintain jobs in Llanelli. Do not confirm Rover's view that nothing has changed. Do not let the actions of this minority jeopardise our business or threaten the livelihoods of you and your family. Above all <u>do not support strike action.</u>

CHAIRMAN

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